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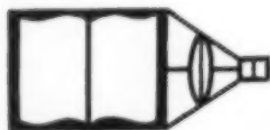
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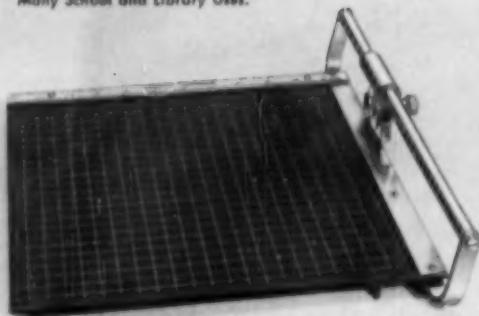


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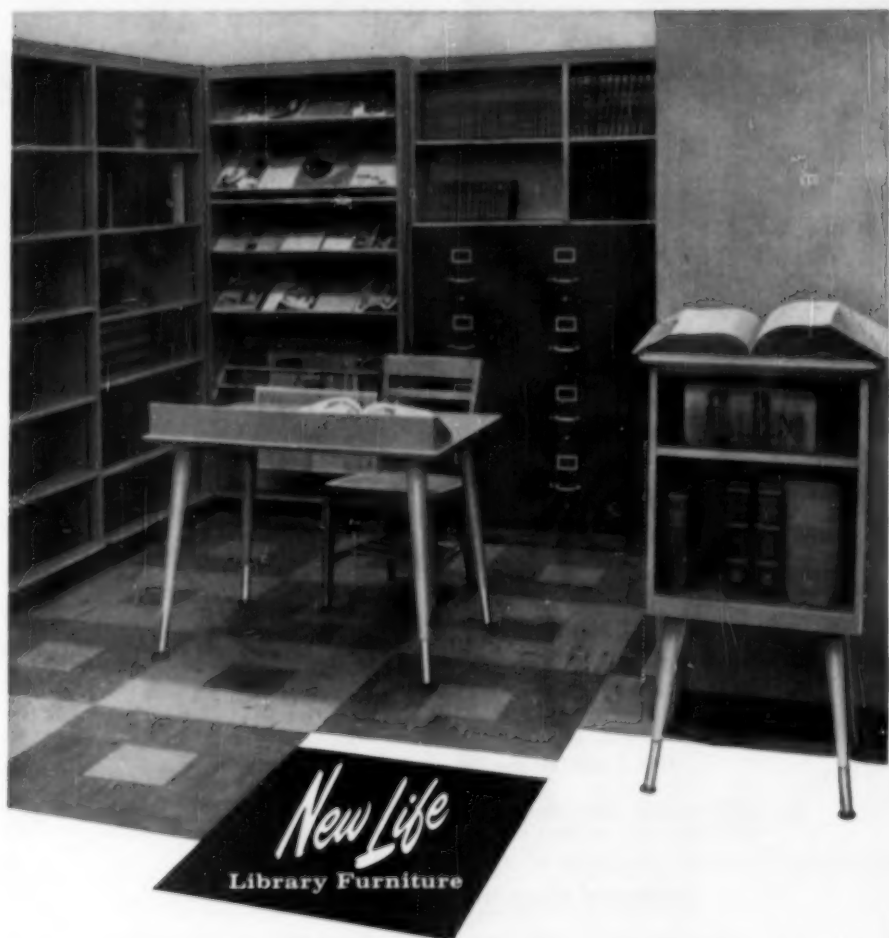
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Volume 18, Number 2

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A Quagmire of Scientific Literature?

EVER SINCE JULY 1945, when Vannevar Bush described the quandary of scientists who are swamped by the literature of their field, men working in pure science or technology have been worrying about bibliographical control over the flood of their publications which threatens to interrupt their own research.¹ John E. Burchard, writing four years after Bush, thought that the sheer bulk of published writings and the difficulties of quick and explicit accessibility were causing a literary "Waterloo of Science."² In 1953, Maieron and Howell stated that "for a number of years it has been apparent that conventional methods of indexing and classifying technical literature can no longer cope with the ever increasing flood. It is frequently more economical to repeat work of the past than to search the technical literature for the desired item. . . ." ³ And Mitchell clearly argued that "the tremendous increase in the volume of technical literature of all kinds and fields is presenting the librarian with an almost impossible reference task. The sheer volume of these documents is creating a filing problem of the first magnitude. When this volume is combined with the fact that many documents cut across classification lines, the problem of providing reference bibliographies is made that much more difficult."⁴ Librarians as a

group have been slow to realize that scientists are truly worried about their literature situation.

An analysis of this literature problem shows that in the last fifteen years the scientist has become a publisher in similar quantity to the humanists and social scientists of the last several centuries; and, in the field of science, the unit needing classification and housing and retrieval "has changed from macroscopic masses embodied in books to microscopic units embodied in articles."⁵ A comparison of publishing method in different disciplines may reveal the cause of the scientists' dilemma. In the humanities and social sciences, publication is primarily divided between periodicals, which describe the results of new research, and monographs, which provide the more fully documented statements. For both of these, there is adequate listing and suitable indexing. In science, on the other hand, the publishing scheme is a complex one made up of the technical report, the pre-print, the periodical, and finally the monograph. There is little control bibliographically over the technical report, none over the pre-print, and only delayed control over the periodical. However, when the scientist is asked his information-gathering habits, he replies as follows, in this approximate order: his direct sources are advanced publications, research periodicals, technical reports, and handbooks, and his indirect sources are conversations, regular perusal of periodicals, references cited in books and papers, abstracts and indexes.⁶

¹ Vannevar Bush, "As We May Think," *Atlantic Monthly*, CLXXVI (1945), 101-08.

² John E. Burchard, "The Waterloo of Science," *Revue de la Documentation*, XVI (1949), 94-97.

³ Alvin T. Maieron and W. W. Howell, "Application of Standard Business Machine Punched-card Equipment to Metallurgical Literature References," *American Documentation*, IV (1953), 3.

⁴ Herbert F. Mitchell, Jr., "The Use of the UNIVAC Facsimile System in the Library Reference Field," *American Documentation*, IV (1953), 16.

⁵ S. R. Ranganathan, *Philosophy of Library Classification* (Copenhagen: Munksgaard, 1951), p. 13.

⁶ Saul Horner, in a paper entitled "The Information Gathering Habits of Johns Hopkins Scientists" which was reported by Marjorie R. Hyslop in her "Documentalists Consider Machine Techniques," *Special Librarian*, XLIV (1953), 197-98.

Mr. Weber is assistant to the director, Harvard University Library.

It should be evident, therefore, that unified bibliographical control over this variety of publishing forms is really the problem, and the difficulty is not caused by any form of informational freakishness which should force librarians or scientists to turn to machine storage in order to gain access to the material they need. It is all too often that the scientist or documentation expert starts his argument with the thesis that scientific literature is flooding the laboratories and proceeds to argue for the development of the Memex, Ultrafax, Rapid Selector, Avakian's AMFIS, Minicard, and other complex and expensive devices for storage and retrieval of information.

It can often be seen, through hindsight, that a problem has not been tackled by a slight adjustment but by a wholly new process or device which many times proves less suitable than the old process in its greatest development. Battelle Memorial Institute reported one typical instance in a recent evaluation of techniques commonly used for literature collection and analysis. "It became quite evident during preliminary investigations that the old-fashioned manual systems had not previously been thoroughly evaluated and that these techniques, thought to be outdated, seemed not to have been fully exploited in the past. It was concluded that the time had come for re-evaluating manual systems or combinations of manual-machine methods before proceeding exclusively to the evaluation and development of machine systems."⁷ The result at Battelle was a completely manual system.

The handling of difficult collections of materials, be they pamphlets, reprints, serials, documents, or monographs, has been the long-standing business of the library profession. If the librarian in the disciplines of pure science and technology professes inability to handle these

materials and produce the information desired by the scientists, it may well be that the librarian's approach is wrong, that the library is understaffed, or that there is not enough money put into the bibliographical apparatus—an expense which is not so glamorous a way to spend money as would be some unorthodox machine. To put it another way, if the indexing and abstracting services in science do not provide the information which is needed, the librarian should make every effort to do this listing and indexing for reports, pre-prints, or periodical articles, whenever needed by his clients, just as he now does for monographic materials. It is a simple problem, and the solutions are also simple, though they may be moderately expensive.

Subject analysis of material—and its corollary, the location of material from a subject approach—is a separate and distinct problem from that of author and title listing. The latter is but a temporal problem needing concerted attention. But the subject approach to one's library is ordinarily fragmentary indeed, as compared to the relative comprehensiveness for the author approach, so it should *ipso facto* be part of a system of indexes designed to reveal what exists anywhere in print on the particular subject of concern. However, take the scientist who professes interest in the subject content of only his own library, perhaps because he can assume his library is all but comprehensive within his interests. Even here, library methods of an orthodox type can do practically everything a machine can, and can generally do it faster. Shaw has said that, "depending upon the type of search, it is even doubtful whether the fastest electronic machine that we can postulate will ever be able to search for a series of *author* entries as rapidly or as economically as . . . can be done in a conventional card catalog." And he goes on to say that "when large files have to be maintained and when they have to be

⁷ Robert W. Gibson, Jr., and Ben-Ami Lipetz, "New Look in Manual Methods," *Special Libraries*, XLVII (1956), 108.

searched repeatedly for *subject* information, great reduction in space requirements and in searching time and in copying time may be achieved by mechanization."⁸

Even this qualified statement, by a person who is adept at machine application, suggests more for the machine than should be expected. The most important factor which is usually overlooked is that the machines contribute substantially only to the consumption end, not the production end; because human cataloging or encoding is the essential preliminary to any mechanized storage and consultation. Vannevar Bush is at his most imaginative when he outlines how machines might hurdle this biggest of problems: "When the user is building a trail, he names it, inserts the name in his code book, and taps it out on his keyboard."⁹ Note that the human being must "name" the subject before the machine can store and return it for use; machines cannot yet replace traditional library methods in this analysis. And even on the consumption end, Dr. Bush reminds us that "the prime action of use is selection, and here [machines] are halting indeed."¹⁰

Let us turn to more minute concerns. Discussion as to the relative merits of card catalogs and storage machine frequently boils down to two capacities: high subject specificity and multiple subject approach. Specificity refers to subject access at the particular level rather than the general. It is one thing to put a book on female cat diseases under a subject heading *MEDICINE*. It is more specific to put it under the heading *MEDICINE—ANIMALS*, or, even more specific, under *MEDICINE—CATS—FEMALE*. Although librarians have always aimed at placing a book under its most specific heading, it has been understood that this would never be taken to extremes. On the other

hand, scientists want headings that regularly place the information under the most specific heading possible. Taxonomic classification, based on family relationships, would theoretically satisfy everyone; but neither for machines nor for a classed catalog has a universally acceptable taxonomic classification for the entire range of knowledge been developed. Under any condition, therefore, the card catalog can do as well as the machine on specificity.

As for multiple subject approach, classification of books on the shelf provides single access, and this does not suffice for adequate subject approach in the sciences, nor even in the humanities and social sciences. However, card catalogs, and particularly classed card catalogs, can satisfy this need. A book that is listed in the catalog under the headings *CATS* and *VETERINARY MEDICINE* and *ANIMAL DISEASE* will be given three approaches. Here again, the card catalog is theoretically as versatile as the machine.

To see where machines run into their basic trouble, one has only to consider the mathematical structure of language. Language, as analyzed by symbolic logic, presents extreme complications to the coding process and the subsequent retrieval; for every language has built-in entropy (electronic's "noise"), in phonetics, semantics, inflection, and syntactical construction. However, definition in terms of probabilities goes far to point out a solution, even allowing full weight to redundancy (whether it is the "K" of *key* and the "K" of *cool*, or "page" as a *messenger* or *leaf* of a book); but it is still only a theory, which will not come to practical application for many years. In his discussion of machine translation which involves coding followed by decoding, Whatmough explains this small but as yet unsurmounted barrier:

A human translator has the necessary circulatory pathways established already as patterns of neural activity by virtue of being

⁸ Ralph Shaw, "Mechanical and Electronic Aids for Bibliography," *Library Trends*, II (1954), 330-31. *Italics mine.*

⁹ Bush, *op. cit.*, 107.

¹⁰ *Ibid.*, 105.

bilingual. It appears likely, simply in terms of regional examination of the human living brain and its functioning that speech and "thought" are very much connectible. Language to a tremendous extent is a matter of habit—if it were not, communication would be impossible; but the areas of association on the basis of which most of our linguistic and non-linguistic behavior is to be accounted for, the socio-personal areas, are so closely linked, that cerebration, if done symbolically, with both the outside universe and inner "experience" as a unified frame of reference, is done with linguistic symbolism, or at least within a system of operations based on linguistic symbolism.¹¹

Machines imitate the human brain which is based on the neuron's binary action and which handles morphemes (words or independently significant parts) rather than phonemes (parts of words which are minimum speech sounds).

But, and this is the crux of the matter, the machine must now be provided with a statistical distribution law for the relative frequency of occurrence of the units and constructions of language, the "circulatory pathways" using "linguistic symbolism," in order for it to be an information system independent of restrictions of subject matter, size of vocabulary, human pre-editing or post-editing, and the amount of text. Such a law is not yet within sight. Taube and his associates found that a "dictionary of associations" would be necessary to solve many of the semantic problems still faced by their system of coordinate indexing.¹² And, most recently, Perry and his associates have spent years working on machine literature searching before finding that the coding system for machines would have to use symbolism for "semantic factors" and "analytic relationships" and that a "code dictionary" would have to be con-

structed so as to deal with language problems.¹³

The conclusion to be drawn is that the use of machines for storage and retrieval of information is likely to be practicable only through a man-machine partnership, and is not going to be commonly feasible for many years to come. If financial costs can be left out of the question, and if specificity and multiple approach are not critical determinants, under what conditions may storage machines be superior to the card catalog? It is here contended that the machine will be the better choice only when all of the following conditions prevail:

1. A single subject is being covered.
2. There is a high concentration of publications in this subject area.
3. There is a continuing high intake rate of publications.
4. Adequate subject access is unavailable in published form.
5. Use is made by people having several different approaches or uses in mind.
6. There is high urgency in the location of every pertinent publication.

In such a case, there is a probability that some unorthodox method of storing and retrieving information may be required. (The Uniterm system of coordinate indexing seems suitable only when the above conditions apply and when the collection indexed is not to reach 100,000 items.) Shera says that the use of machines "seems likely to be limited to the more complex problems of bibliographical searching, and therefore, they may not be applicable to the entire range of bibliothecal operations."¹⁴

It is nevertheless unquestioned that libraries in science and technology must improve in order to cope with the growth of their diverse literature. Compreh-

(Continued on page 118)

¹¹ Joshua Whatmough, *Language, a Modern Synthesis* (New York: St. Martin's Press, 1956), 213-14.

¹² See page 7 and *passim* in Mortimer Taube and Associates, "Storage and Retrieval of Information by Means of the Association of Ideas," *American Documentation*, VI (1955).

¹³ James W. Perry, Allen Kent and Madeline M. Berry, *Machine Literature Searching* (New York: Interscience Publishers, 1956), p. 84.

¹⁴ Jesse H. Shera, "Effect of Machine Methods on the Organization of Knowledge," *American Documentation*, III (1952), 16.

By HENRY J. DUBESTER

The Catalog—A Finding List?

WE ARE TOLD that as reference librarians, with responsibility to make our views known to those concerned with code revision, we should examine the alternative functions of the catalog. These alternatives, briefly stated, are between the catalog as a finding list and the catalog as a reference or bibliographic tool.

The manner in which the problem is postulated reminds me of the history of the so-called "mind-body problem." Philosophers at least as early as Aristotle were concerned with the relationship between the mind and body. They knew that there was a relationship, but were defeated in their efforts to explain adequately how the material body could affect the non-material mind and vice versa. As long as the question was posed in a manner that assumed the essential difference between mind and body, there could be no effective understanding. Only when scientific reason proceeded to assume that body and mind were the same (mind as an emergent phenomenon of body in a particular state of organization) was the necessary basis secured for modern scientific investigation in this field.

Although this is a glaring over-simplification of a complex problem, a parallel may be drawn to the problem offered to the reference librarian. He is asked to assess the relationship between the catalog as a finding list and as a reference tool. The essential difference in the nature of the two things is assumed. Is this assumption justified?

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Problems of Reference Librarian

The reference librarian has faced the results of rather practical problems which have confronted the administrators of large libraries. Growing cataloging costs and growing costs of maintaining large and complex catalogs have required an examination of present practices and a development of hospitality to changes in the accepted way of doing things. The suggestions that have been offered at one time or another would accomplish one or several changes. They would simplify cataloging by limiting the information placed on the catalog entry or by limiting the research invested in securing information for the catalog entry; or they would reorganize the catalog in the direction of eliminating entries. Such elimination might be through dividing the catalog so that the new parts would be less complex than the structure of the prior whole, or through the withdrawal of homogenous elements with the further intention of presenting the withdrawn portions in book form; or through combinations and variations of these processes.

Invariably, in the face of these suggestions, the reference librarian confronts a difficult situation. He or she has accumulated experience which has demonstrated the usefulness of some of the information which would henceforth be systematically eliminated from the catalog card or from the catalog. He or she has experience with the inner relationships of this so-called "complex structure" which has led to the identification of materials that would otherwise have been missed. The reference librarian is not in a good position to quantify this experience and to reduce it to the form of a statistical expression. The evidence is usually mar-

shall be in anecdotal form and as such is subjective, impressionistic, biased, and generally unreliable in this era which places a premium on concrete evidence and statistical fact.

Although a considerable literature has evolved concerning approaches toward the resolution of these questions, the essential problem has not been altered appreciably, nor have there been any very significant tests through practical implementation. Significant variations in the structure and in the organization of catalogs and in cataloging practices are found in special libraries and documentation centers with their collections of special types of materials, and their obligation to serve a special public with predetermined needs and interests. The general research library, with interests in the arts, sciences, and humanities has remained essentially unaffected. The general research library has, however, accepted the challenge posed by the enormous influx of published matter. It has accepted the need to explore the possibility of asserting radical changes in patterns that are now old enough to be suspect by a new generation of librarians who are stimulated by the developments in mechanization and in the ideational content of the broad complex we call "documentation."

Nevertheless, the reference librarian, in his day-by-day work of serving a general public and assisting in providing access to collections embracing broad fields of knowledge, is holding firm in insisting on the value, merit, and usefulness of the traditional approaches. He is all but inarticulate, however, in his efforts to convince those proposing changes and choices that the old approaches—the full cataloging, the dictionary arrangements—have not lost their essential validity. There is good reason to believe that any attempt to dismiss the position of the reference librarian as a narrow effort to forestall the inevitable march of prog-

ress will itself prove to be shortsighted in its wider implications.

Further Questions

Some of the difficulties in rationalizing the arguments, the different interpretations and analysis, and the proposals for choice or change, may be dispelled if further questions are raised as to the exact meanings and implications of the terms "finding list" and "reference tools" which are used as if all can agree on their definitions. In the context of the arguments, these terms are used in apparent opposition, as if they represent different things and as if the proposed choice between them were a real and actual choice. The reference librarian may properly argue, however, that the distinction is more apparent than real, and that the choice is spurious rather than actual.

The lack of choice becomes rather obvious when it is realized that with respect to the function of the catalog as a finding list the reference librarian has no choice whatsoever. Whatever else it may be or may become, the library's catalog must serve to locate materials in a library's collection. If it does not do this, it has only little or occasional value in providing access to the collections.

Thus, there is an immediate qualification to the choice that is offered. The catalog must be a finding tool, and if this is accepted one half of the choice is removed. What then remains of the other half, the function of the catalog as an effective bibliographic or reference tool? It is at this point that we might assert categorically that in order to serve its finding purpose, the catalog must be a bibliographic and reference tool as well; or alternatively, that only insofar as the catalog provides bibliographic or reference information can it function adequately as a finding tool. This can be demonstrated by a closer examination of the meaning of the term "finding tool."

Does "finding" mean merely to locate an entry in the catalog when the basic in-

formation required for the proper identification of the item (in accordance with established cataloging practices) is available? Does the finding function of the catalog also include the responsibility to aid in the identification of the item as a precondition of its location in the collections?

If the first of these alternatives is accepted as defining the finding function we may examine some interesting implications. We may ask, for example, what aspects of the conventional cataloging elements are basic and indispensable for finding. The author entry? Yes, it is indispensable. The title? It, too, is indispensable. The edition, imprint, collation, series and bibliographic notes, etc.? Apparently we can do without these, as did the editor of the New York State Library's *Checklist of Books and Pamphlets in the Social Sciences*,¹ which was designed solely with the finding purpose uppermost. It means, in fact, that, in its *reductio ad absurdum*, only the author and title have to be known in the manner in which they are entered in the catalog for the desired work to be findable. This, of course, only pinpoints the difficulty which is the common bond of all reference librarians. The author may be known but not the title, or vice versa. The author may be known in a form other than that in which it is entered in the catalog. The work may not be known by author or by title, but rather in its series or other relationships.

The experienced reference librarian can multiply these examples in kind and in quantity. We know that not infrequently the problem of locating a work is not one of having incomplete information but rather one of having incorrect information. In such instances, the ob-

vious prior task to finding is the task of identification. Furthermore, the librarian's task is very frequently one of selection according to practically unlimited criteria. This task is also one which requires identification prior to location and normally utilizes some or all of the elements of the conventional fully-cataloged entry.

All this is to say that to divorce identification, which entails the exploitation of the total results of the skilled cataloger's enterprise, from finding is to erect an artificial distinction which does not apply in practice.

To argue that the published bibliography can replace the bibliographic function provided by the catalog, in the broadest sense of such proposal, is to ignore the fact that bibliographic compilations tend to rely on the very tools that are to be modified. With rare exceptions, bibliographies are compiled in libraries—in libraries with extensive collections and with catalogs which represent these collections in consideration of the different types of approaches that are usually made to the materials. If libraries were to limit their cataloging on the assumption that the finding function is the only proper function of the catalog, ignoring the relationship between identification and finding, and assuming a permanent reliance on published bibliographies, it may be realized to the sorrow of the library profession that a rather circular process has been engendered which denies the information for the development of the tool that is expected to serve in place of the information denied.

The reference librarian must also cautiously investigate the implications of any decision which in the first place accepts the distinction between the finding and the reference functions of the catalog, and secondly asserts that the first has a higher order of preference than the second. It should be recalled that, in its present setting, the problem is raised and

¹ The *Checklist of Books and Pamphlets in the Social Sciences*, a 142-page, two-columned list, aiming at a title per line, was produced in 1956 by means of I.B.M. punched card techniques at the New York State Library in Albany. It provides author, title, imprint date, and class number. The compilation was designed with a specific purpose and in the face of a special need served by that library, and no criticism is here intended or implied.

stimulated by the attempts to secure catalog code revision. Code revision, for the present, is mainly concerned with the *A.L.A. Cataloging Rules—Author and Title*, but the recombining of rules for description with rules for author and title entry is indicated for the future. Only in the farther reaches of this enterprise will reconsideration of the rules of descriptive cataloging or a code for subject cataloging become matters of the moment. We may assume that eventually the latter rules will require renewed attention for the very same reasons that led to revision of the rules for author and title entry, including reasons based on economy, on the need for standardization, and on the need to make practices conform to changes in the environment in which the rules are applied.

If the reference librarian concedes that bibliographic information provided in the code for author and title entries is not an aspect of finding materials in the collections of a library through its catalog, the stage will have been set for the argument that such bibliographic information is dispensable in the descriptive and subject analysis of this material.

In the foregoing we have mentioned the choice confronting the reference librarian. No attention has been paid to the most prominent user of the library's catalog—the reader. The reader is not only inarticulate, he is anonymous. He may or may not experience problems in his use of the catalog. If he does, he may or may not seek help from the reference librarian. Conventionally, we have permitted the reference librarian to represent the reader, assuming that there is an essential identity between the two. This assumption, like so many others that are made in this broad problem area, is not entirely warranted. The reference librarian, at least today, approaches his service and work with certain academic preparation which is soon complemented by actual experience in the use of the catalog

which helps in coping with the vagaries and the complexities that have so far been an inescapable adjunct of reference work. The reader is an indeterminate entity. In the college and university library he may be a graduate or undergraduate student, a member of the faculty, a visiting scholar. In the general large public or research library (and this group frequently includes our large university libraries) the reader may be a scholar, a layman pursuing a variety of individual interests, or even a burdensome crackpot. In fact, the distinction that is to be drawn among the larger libraries is becoming more diffuse, and all tend to serve many of the same elements with difference in concentration and official emphasis. A reader who is a scholar and specialist in a given field may use the library for purposes entirely unconnected with his specialization and may therefore have all the attributes of the undergraduate student or layman. The objective appraisal of reader behavior is coming to the forefront of recognized needs. The Library of the Massachusetts Institute of Technology has exploited the techniques of "operations research" recently to study reader behavior. Perhaps of more immediate consequence is the Catalog Use Survey sponsored by the American Library Association, which uses a standardized questionnaire to itemize reader behavior at the catalog, discriminating between subject and author approaches, but permitting analysis of their relationships; and also discriminating between the approaches to the catalog in terms of their success and failure. The findings of such studies need not necessarily agree with the less objective appraisals by the reference librarian. At present, they are first approaches and may correctly be considered as the basis for further exploration in detail. Their importance, in long range extension, is not to be underestimated. It would be hazardous, however, to sud-

denly shift grounds and to assume that the objective evidence of preliminary studies of reader behavior can justify courses of action questioned by the collective experience of reference librarians. This, of course, assumes an essential disagreement, which may be not at all the case.

One final aspect of the problem of choice between the catalog as a finding and as a bibliographic or reference tool requires attention. It has been posited that the distinction between the catalog as a finding tool against its use as a reference and bibliographic tool is not a realistic or a practical one. If this is accepted, what are the consequences of this view on the scope and structure of the catalog, and more immediately on the problem of code revision?

We would like to approach an answer in a rather roundabout manner. The reference librarian is necessarily faced with the fact that there is a direct relationship between the amount of information in the catalog and the ease of his work. This is true whether the reference librarian works only with readers, or in addition replies to written reference inquiries, compiles bibliographies, or undertakes research projects. Stated in another fashion, it is the common experience of reference librarians that the larger the number of approaches to a work in a catalog, the easier is the task of the reference librarian. Therefore, any development in the code for author and title entry which limits the information on the catalog card, or which reduces the approaches to a work, would appear to hinder rather than to serve the reference librarian in identifying and locating materials through the use of the catalog.

Even granting this, we know that the reference librarian is one of many members of a larger library team, and that many functions besides that of reference depend on the catalog for their effective performance. Code revision will affect

the entire staff, not merely the reference librarian. It is this which has to be considered by the entire library profession, of which the reference librarian is merely one component.

With this in mind, it may be suggested that a revised code should be one that has as its goal the ideal catalog. It may provide for economies, insofar as such economies are of a type which a significant number of libraries are likely to adopt; but it should not let the desire for economy become a limiting factor on the code itself. We must remember that regardless of how pressing the problems are which have caused library administrators to examine their present practices, there still remain libraries with ability to limit their acquisitions within prescribed boundaries and with adequate staff to catalog current acquisitions. Such libraries will not be served by rules oriented to those libraries seeking curtailment in the quality of the cataloging effort in order to achieve quantity. Even the latter will in most cases reserve certain types of materials for ideal cataloging in perfect recognition of the lasting importance of this type of record for long-term reference work. It would then behoove the individual library to take administrative steps designed to adapt the code as revised to their particular situation. Certainly this has been the normal state of things in libraries whether we wish to recognize the fact or not.

It is this writer's understanding that the original impetus toward code revision was prompted by the recognition of a need to rationalize the rules as they have developed, to bring together related rules which are now scattered throughout the body of the present code, to improve rules for entering corporate bodies and societies and institutions, and in general to develop a code with a coherent body of principles and a reduced emphasis on individual rules for all pos-

(Continued on page 159)

An Inexpensive Transaction Number Charging System With Book Record

MOST OF THE MECHANIZED charging systems fail to meet the requirements of university, college, and certain other libraries. These libraries need a record of charged out books arranged by call number. The system proposed here is designed to meet this need specifically and to bring about operational savings at the same time. It is of special interest to libraries that are contemplating extensive reclassification, because book pockets and book cards have been eliminated. Libraries with crowded charging desks will welcome the separation of the book discharging procedure from the desk.

The components of the proposed system are not new. Transaction numbers have been used for charging with success in many libraries; and marginal punched cards, used lately in libraries, have been employed in business establishments for such a long time that the patent rights have expired. The proposed system is very flexible, but there is no need to point out the many possible variations in order to show more clearly the one modification of most general application. Libraries with circulation figures of less than 100 per day may prefer to dispense with the punching of the transaction number in charging, then hand-sort the charge cards in the final discharging procedure.

One feature of the proposed system is the availability of the charge cards for analysis of book circulation without interference to the regular circulation rou-

tines. Overdues and renewals require a small amount of extra work; but the adoption of the system is urged on the premise that this extra work is well compensated by work savings on regular charges, which are greatly in the majority.

As is generally true, a full description of an unfamiliar system appears much more complicated than the system would be in operation. In our description, we shall follow the processes connected with a book, just cataloged, through the preparation, charging and discharging procedure; then we shall examine how the system works; and finally we shall compare it, working step by working step, with the book-card/date-due tab system, the two-book-cards system, and the call slip used as charge card (closed-stack library) system.

Preparation, Charging, and Discharging of a Book

The book has just been cataloged and both a designated page and the spine have been marked with the call number. A date-due slip is pasted into the book and it is ready for shelving. No book pocket or book card is needed.

When the patron wants to take the book out, he is required to fill out a charge card essentially like the one illustrated. These cards should be freely available to the patrons for use at the catalog. In closed stack libraries they would serve also as call slips.

At the charging desk we find a numbering machine like the ones used in many libraries for accessioning. The machine is set to stamp the same number twice be-

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fore it advances one number. Coupled with this numbering machine is a date stamp, which is set to indicate the date due. The desk attendant stamps the date-due slip and the charge card with that double stamping machine, so that both the slip and the card show the same identical number and date due. Henceforth, we shall refer to the number stamped by the numbering machine as the transaction number.

As soon as the date-due slip has been stamped, the patron can leave the desk with the book.

The desk attendant punches the charge card, a simple procedure requiring detailed explanation. Let us first consider the date-due code shown at the top of the charge card. The code refers to one calendar month and we see that there are ten numbers available for each month. Therefore, one might assign number (1) for books due on the first, second, and third of the month, number (2) for books due the fourth, fifth, and sixth of the month, and so on. (Of course each code number could be used to indicate a longer span of days, if desirable.)

Our punch is very similar to a three-hole punch used in most offices, but it punches out in a scallop pattern all numbers except the one which we are coding. A charge card for a book due January 5 would look like the illustration of a charge card coded for date due.

All this punching can be done with the movement of one lever, just as on a three-hole punch. The punch must be reset whenever the date-due code changes.

On the right-hand side of the charge card we see the code for the transaction number. This type of code is the standard sequence sorting code adopted for marginal punched cards. Again, we use a punching machine similar to a three-hole punch, but instead of one lever punching three holes, we have a punch key for each number shown on the card, each key

CHARGE CARD

marked like the number keys of a typewriter or adding machine. Each key punches out a groove at the spot designated by the corresponding number on the card.

To punch the transaction number 376 into the charge card, the attendant inserts the card and presses the following keys: 100, 200, 70, 2, and 4. The right hand margin of the card then looks like the accompanying illustration.

After a little practice on the transac-

CHARGE CARD CODED FOR DATE DUE

To punch // From		To punch // From	
1	1	6	2 6 k
2	2	7	7
3	1 6 7	8	1 6 7
4	5	9	2 6 7

CHARGE CARD CODED FOR TRANSACTION NUMBER

tion number punch, the attendant will be able to press two keys simultaneously, so that the whole punching process may be accomplished in approximately ten to twelve seconds per card.¹

The card is then filed by book number in the circulation file (book record) and normally remains there till the last coded due date—in our case till the night of January 6, because date-due code number 2 covers the period of January 4, 5, and 6.

We will come back to our charge card later on after discussing the first step in the discharge procedure and the use of mimeographed or printed check lists. The lists represent transaction numbers arranged in columns, headed by the date-due code number, starting with number one and ending with the maximum number circulation expected during the time that one date-due code is effective—in our case, the maximum circulation expected during three days.

When the book is returned, the transaction number on the date-due slip and the corresponding number on the check list are both crossed off the check list. The book is immediately ready for shelving.

As mentioned, the card for date-due code number 2, January, 1953, transaction number 376, remains in the circulation file till the night of January 6. On the following day, a clerk or desk attendant takes a key for marginal punched cards, which resembles a knitting needle

with a handle. He inserts the key through the number 2 date-due code holes of the cards in each file tray and lifts out the cards so coded with one movement for each tray. That action ends the discharging procedure for our particular book, provided it has been returned on time and does not represent a special charge. Problems of that nature will be discussed at the end of the following section.

How the System Works

Any charging system must be designed to perform a particular job at the lowest possible cost of operation. Practically all circulation records indicate which books are charged out to whom and when they are due. In our case, this information must be filed by call number, so that a person inquiring about a particular book can be told whether the book is out, who has it, and when it is due.

The charging and discharging procedures of the proposed system have been explained in detail, and it remains to compare them with the routines of the now prevalent systems using book cards² and/or call slips. Such a comparison shows that libraries using book cards will save considerable working time by eliminating book cards and book pockets, but the patron has more writing to do on the charge cards, especially when he selects books directly from the shelves. (Patrons who check out many books may prefer to have a rubber stamp made with name, address, and identification number and then carry stamped cards.) When charging books, the desk attendant must check the call number on the charge card with the one on the book. Although this procedure takes some time, it takes little longer than charging with a book card. Book cards also must be checked, because they are often placed in the wrong book and mistakes do happen in the typing of new and replacement cards. In

¹ Charge cards could be bought pre-numbered and pre-punched and kept at the charge desk. The borrower would fill out a paper sticker which would then be pasted to the card. If this version appears preferable, the author will gladly supply further information.

² Book cards are cards bearing the author, title, and book number of a book and are placed inside that book while it is on the shelves.

closed stack libraries that use call slips for their charge files, the charge card would also serve as call slip and the savings in adopting the proposed system would be derived entirely from the simplified discharge procedure. The punching of the charge card takes little more time than any other means of indicating the date due.³

When the book is returned, only the transaction numbers are crossed off on the check list and on the date-due slip. How does that procedure affect our circulation routine? In the first place, the book need not be returned to the charging desk or circulation file for discharging. The book can be handled in an adjacent room, by a person who need not know anything about book numbers and the circulation file. Because the crossing off of the transaction numbers takes only a few seconds, the book is immediately ready for shelving and there will be fewer inquiries when books are on the shelf instead of being held for discharging with a book card. The books do not physically interfere with access to the circulation file nor does the discharging procedure interfere with the desk attendant's access to the circulation file for filing of new cards and for answering inquiries.⁴

The circulation file (book record) contains a card for each book charged out, including those books which have been returned before the coded date due. Because it does contain charge cards for returned books, use of a check list becomes necessary. To determine the location of a book, the desk attendant looks in the circulation file with the following results: (1) If no card is found, the book is in the library. (2) If a card is found, the desk attendant looks at the transaction number and date-due code, then he looks under that number on the check

list. (3) If the transaction number on the check list is crossed off, the book has been returned and the attendant discards the charge card. (4) If the transaction number on the check list is not crossed off, the book is still-out.

If a book is charged out again before the former charge card has been removed from the circulation file, the attendant filing the new charge card will find call number and copy number duplicated and he can discard the old card.

Renewals are made simply by penciling a red "R" next to the corresponding transaction number on the check list. Discharge of overdues and renewals and handling of long time charges are discussed later.

We have pointed out that the final discharge procedure for most books consists of pulling the charge cards from the circulation file by means of a key for marginal punched cards. But the pulled cards contain also the overdues and renewals. To find them, we sort the cards in sequence of transaction number by means of the punched transaction number code. This is not the place to explain how the code works; any firm trading in marginal punched cards will gladly arrange for a demonstration. At this time it may suffice to say that the cards are aligned, then the key is inserted subsequently into every code groove (or hole) from right to left. Each time, part of the cards will drop out and the dropped cards are placed at the back of the pack being sorted. This system is the fastest card sequence sorting system presently used in American business establishments. The whole procedure takes only a few minutes for each time the cards are pulled from the circulation file.

Now we take the check list and pick out the charge card for every transaction number not crossed off. The rest of the cards are discarded. Cards for books which have been renewed, as indicated on the check list, are marked with an

³ If the library does not send overdue notices, it must have some other method of claiming the book.

⁴ A modification permits the complete physical separation of book return and charge desk.

"R." If desirable, overdue notices are sent out for the overdue books. Then a signal tab is placed on the upper left-hand margin of each card and the cards are put back into the circulation file.

Overdue and renewed books must be returned to the circulation desk for individual pulling of the charge card. These cards can be found easily because they are marked with tabs. Charge cards for overdue books will be pulled automatically once a month for further action. They can be recognized among the pulled cards by the signal tab and should be taken out before the sequence sorting of the cards.

Charge cards for long-time charges will have all date-due numbers punched out and therefore are not affected by the sorting key when pulling cards due. These

books must be returned to the circulation file for individual pulling of the charge cards. If whole collections are checked out and returned in one group, as is often the case in libraries with reserve rooms, then a special code can be punched. Such a code provision is shown in the illustration of the charge card marked "Reserve." Additional special coding could be provided on the bottom and left-hand margin of the card for charges and circulation analysis. To drop out cards so coded, all cards must be removed from the circulation file in groups and the key inserted at the special code groove. The cards that remain on the key retain their proper order and can simply be placed back in the circulation file. The same method could be used to take inventory of a special collection checked out.

COMPARISON OF WORKING STEPS

SYSTEM A <i>Single book card/date-due tab system</i>	SYSTEM C <i>Call slip used as charge card system (in closed stack library)</i>	SYSTEM D <i>Marginal punch card/transaction number stamp system</i>
SYSTEM B <i>Two-card system (Variations from system A shown in parenthesis)</i>		
I. PRELIMINARY WORK		
A book pocket is pasted into each book.	<i>Not needed</i>	<i>Not needed</i>
A book card is typed and placed in the book pocket of every book, including hundreds that will never be used. (2 cards)	<i>Not needed</i>	<i>Not needed</i>
A date-due slip is pasted into each book.	<i>Same as A</i>	<i>Same as A</i>
<i>Not needed</i>	<i>Not needed</i>	Prepare mimeographed checklist. One stencil, 500 copies, supply four years requirements.
II. CHARGING		
The patron writes his name, number and address on the book card (s).	Patron writes same as in D on call slip.	The patron writes name, number, address, call no., author, and title on charge card.
Desk attendant stamps date due on date-due slip and on the book card (s).	He stamps same on date-due slip and call slip.	Desk attendant stamps transaction number and date due on the date-due slip and on the charge card (all on one stamp).

Desk attendant places date-due tab on the book card. (Not for two-card system)	Same as A or D according to system used.	Desk attendant punches date due and transaction number code on the charge card.
Desk attendant files book card(s) by call number (and date due).	He files call slip by call number.	He files charge card by call number.

III. DISCHARGING

SYSTEM A AND B	SYSTEM C	SYSTEM D
Book is returned to circulation desk for discharging procedure. (Space needed for returned books)	Same as A	Book is returned near circulation desk for discharging procedure. (Could be modified to return anywhere in the library.)
Book card(s) for each individual book is (are) searched for and removed from the circulation file(s) by a person who must understand that file (the files)—Interference with filing of book cards and with consultation of the file. Space needed for a person to search for the cards for returned books.	Same as A	The transaction number appearing on the date-due slip in the returned book and the corresponding number on the check list are crossed off. <i>The book is immediately ready for shelving.</i> <i>Once for each date-due code:</i> All charge cards for books due are removed from the circulation file by means of the sorting key. Act on and refile one month overdues. (Cards with tabs) Charge cards are sequence sorted according to transaction number by means of a sorting key. Transaction numbers not checked off on the check list are overdues or renewals. Mark "R" on renewal cards. Attach tabs to overdue and renewal cards and refile. Discard balance of cards. NOTE: The marginal punch sequence sorting system is the fastest card sequence sorting system presently used.
Book card(s) is (are) placed into book pocket. <i>Book is ready for shelving.</i>	Same as A Same as A	

IV. OVERDUES

Pull individual book cards from the circulation file on or after date due. Act on overdues. Change tabs. Refile book cards in circulation file. (For two-card system: Write overdues from date-due file.)	Same as A	Charge cards are automatically pulled on or after date due by means of the sorting key. Remove cards after sequence sorting as explained in discharging procedure. Act on overdues. Refile charge cards in circulation file.
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V. RENEWALS

Search for book card.	Same as A	Mark transaction number on check list with "R."
Enter new date due on book card.	Same as A	Charge card will be pulled out of the circulation file on the original date due.
Change tabs on book card. (Pull and refile date-due card.)	Same as A	Mark charge card with "R," attach tab and refile in circulation file.

VI. INQUIRIES

Search circulation file for book card.	Same as A	Search circulation file for charge card.
If no card is found, book is in the library.	Same as A	Same as A.
If card is found, book is out.	Same as A	When card is found, check transaction number on check list. If the transaction number is checked off on the list, book has been returned, and the charge card should be discarded. If the number is not checked off, book is still out.

VII. BOOK COLLECTIONS CHECKED OUT AND RETURNED IN ONE PARCEL (Reserve room, departments, binding, class room, etc.)

Books must be discharged individually.	Same as A	By use of specially coded cards, the sorting key can be used to discharge the whole collection at once. This method can be used also for taking inventory of books loaned to a special collection.
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A Quagmire of Scientific Literature?

(Continued from page 106)

sive current subject bibliographies are a primary need. Tauber has stated that "it is almost certain that more selective subject catalogs and more extensively used subject bibliographies will characterize subject analysis in the immediate future."¹⁸ A secondary need is for comprehensive indexing of serial publications, where the situation is distinctly unsatisfactory. Librarians have been ineffectual in eliminating wasteful overlapping of services and in obtaining inclusive indexing; this is a critical situation into which

must be put much more effort.¹⁹ It is logical to expect that a great increase in extremely brief subject entries, arranged in chronological order, will characterize the future subject indexes to scientific materials—with the older material being indexed merely by an author file, and with subject cards thrown out after a period of time.

It can be said with complete assurance that scientific libraries have somewhat different problems from libraries in other disciplines, that they are still far from having satisfactory bibliographical control over scientific literature, and that existing library methods if fully exploited can bring firm ground out of the quagmire that now seems to be threatening.

¹⁸ Maurice F. Tauber and Associates, *Technical Services in Libraries* (New York: Columbia University Press, 1954), p. 175.

¹⁹ On the indexing situation, see Verner W. Clapp and Kathrine O. Murra, "The Improvement of Bibliographic Organization," *Library Quarterly*, XXV (1955), 107.

Punched-Card Charging System For a Small College Library

THE NEED for a new charging system at the library of Wisconsin State College, La Crosse, had long been recognized by the staff. With expanded college enrollment and the subsequent heavier demands for library materials, it was noted that too much staff time was being consumed in circulation routines and that the occurrence of inaccuracies of the present system was increasing. In order to present more clearly the approach to the problem, a brief description of the old charging system is given.

The college enrollment is 1,334; the library's collection of circulating materials totals 63,388; the average daily home circulation is 82, and the charging period is for two weeks. Under the old charging system, a light-weight manila pad, 6" x 8", perforated into 2" squares, was kept at the desk for recording charges. A carbon was used with the pad so that the charges were made in duplicate. When the borrower presented his book to be charged, the desk attendant wrote the call number in one of the perforated squares and stamped the date due in the book; the borrower merely signed his name. Thus, the actual charging procedure was rapid, requiring perhaps not more than two minutes per charge. It was the time required for the remainder of the routines, as well as the inaccuracies, that prompted our search for a system that would better serve the library's needs.

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With the old system, the tabulating of the day's circulation, done the following morning, consisted of the following procedures:

1. Dating all charges.
2. Separating original charges from those made by the carbon.
3. Tearing apart the perforated sheets into individual charges.
4. Filing original charges in date file.
5. Counting and recording circulation.
6. Filing duplicate charges in classed file.

Discharging was a lengthy procedure, also, since there were two charging slips to be pulled—one from the classed file, then the one from the date file. After all the previous day's returns were discharged, the last routine of the daily procedure was to pull from the date file the charges which were just then becoming overdue. These charges were then filed in either the students' delinquent file or the faculty delinquent file, alphabetically by name of borrower. Thus, in discharging, there were really four files to be considered—the classed file which contained the duplicate charges, the regular date file which contained the charges not overdue, and the separate student and faculty delinquent files.

Checking for overdues was done once a week and consisted of the following procedures:

1. Pulling original charging slips from delinquent file and rearranging slips by call number.
2. Checking these slips with shelf list and writing on each overdue slip name of author and title of book. (Sometimes this checking revealed incorrect call numbers which left the checker wonder-

ing what the overdue book was.)

3. Searching shelves.
4. Checking overdue slips with classed file.
(This procedure sometimes showed that the book had been returned and only the one charge pulled.)
5. Rearranging overdue charging slips by borrowers' names.
6. Writing overdue notices.
7. Refiling charges in delinquent file.

The end of semester checking for overdues was accomplished in the same manner as the weekly routine. Delinquent students may not re-register until their library records are clear. Charges for students not re-registering were filed in the "old" delinquent file. Thus, this made another place to search in the event that the book was returned a long time after the student had left school. Faculty overdues were checked two or three times a semester, the procedure being the same, except that no fines were levied. Delinquent charges for faculty members no longer employed at the college were placed in still another file.

As stated at the beginning of this article, the need to facilitate and "speed up" the entire charging process, as well as to eliminate the seemingly inevitable errors, had become a chief concern of the staff. They therefore read about and investigated various systems, one of which was that sponsored by International Business Machines. This seemed good, but it was much too expensive for our library's modest budget. Other experiences of libraries with punched-card systems were examined. In the meantime, our college received an appropriation for a new library building, and staff members visited new libraries within the three-state area of Wisconsin, Minnesota, and Iowa. At each library visited, the charge-system was noted, and, at the State University of Iowa library, the McBee Keysort punched-card system was seen in actual use. This seemed workable and practical for a large university library system. Was it applicable to a small college system?

The staff concerned with this work began to examine the literature on punched cards. The article by F. G. Kilgour in the *Library Journal* for February 15, 1939, was especially helpful. This described the punched-card system being used at Harvard at that time. Other libraries which were using and approving McBee's Keysort cards were the Universities of Georgia, Tennessee, Indiana, and Brown.

Although most of the libraries reporting their experiences were large systems, the staff at La Crosse saw no reason why such a system would not be feasible for a small library. Contact was made with the McBee Company, and its area representative came to explain the Keysort card. Its charging forms were expensive, compared to the simple perforated manila pad used for the old charging method, but there was no expensive machinery to purchase—only the cards, either a simple inexpensive hand clipper or desk model groover, which is rented at a very modest cost, an alignment block, a sorting needle (resembling a blunt knitting needle) and a pack of card savers to be used for renewals. It was decided to try Keysort for two years and a supply of forms for that length of time, since the cards are less expensive when purchased in lots of 25,000, was purchased. The representative showed us samples of cards used in other libraries. Each had distinctive features although the general principles were the same. With the help of the representative, the card shown in the illustration was designed.

The card is quite simple, and many of its printed items are self-explanatory. The "Do not write below" space at the top is used for the date due. Enough room is left here for renewals. Sometimes it is necessary to recall a book for reserve or other reasons, and space is so designated for that. The "Hold for" space is used for recording a reservation on a book, with enough space left for name

[illegible]

and address of person for whom the book is to be held. It is the holes around the edges of the card which give Keysort its flexibility and make the one-file system both possible and practical.

At the beginning of the school year, each week of the semester is numbered "Week 1," "Week 2," or "Week 3" in consecutive order. This record is kept on a calendar at the charging desk. The holes for Weeks 1, 2, and 3 are used because the regular loan period is for two weeks. Thus, books issued during "Week 1" become due during "Week 3"; those issued during "Week 2" become due during "Week 1," etc. The "Week 4" hole is used for irregularities in charging periods which result from school vacations, in which case students are not expected to return materials as when charged for the regular two-week period. The actual charging routine consists of the following:

1. Borrower fill out charging card with call number, author, title, signature, address, telephone number, and campus status. (The "Other" space on the campus status line is used for borrowers outside the college community.)

2. Desk attendant checks card, especially for correctness of call number, stamps date due on both charging card and date slip in book, and drops card in temporary charging box.

This charging routine consumes more borrower's time than the old system, but its advantages, as will be noted, more than compensate.

Tabulation of the day's circulation next morning is quickly done, as compared with the old system. This procedure consists of the following:

1. Desk attendant pastes card savers on renewal charges, then sorts by class, counts, and tabulates all student, faculty, and "other" charges. There may also be mending, binding, end of semester, or other special charges. In the case of end of semester charges, sometimes made to faculty and occasionally to students, the holes for 1st semester, 2nd semester, or summer session are used. Each type of special charge, which has not been so designated on the printed card, is given a symbol, such as:

The hole for 1 may be used for a special temporary recreation book shelf; or, the hole for 2 may be used for a temporary history collection. A code of such designations of special charges is kept attached to the charging desk calendar. When books have been lost and paid for, such recording is made on the charging card and the "Paid for books" hole is punched and the charge refiled until later when the withdrawal is noted on the shelf list.

2. Attendant clips holes of all charges according to their date-due week or other designation. Thus, charges made during "Week 1" are clipped in the "Week 3" space, except that special charges, such as

mending, binding, etc. are clipped in their corresponding spaces. So far, the holes with the alphabet are not used for anything, but they, too, can be designated for any other special charges needed. They may also be clipped to correspond with the borrowers' last names, if ever necessary.

3. Charging cards are then filed in classification file. Originally, only one such file was kept, but, after the first few weeks, we decided to try two classed files, one for active charges, the other for inactive. This reduces the number of cards to be needed for overdues, as well as the number to be checked for clearance records of students withdrawing from school. Both these procedures will be discussed later.

4. Discharging of return books is very simple and fast, since there is only the one charging card to be pulled. Cards are checked at the same time for reservations and overdues. The name and address of the person wishing a book reserved has been entered in the "Hold for" space, and, upon the book's return, that person is notified by mail. For books returned late, the return date and the fine levied are so noted in the places designated, and the charging card then becomes the fine record. Upon payment of the fine, this card is marked "Paid" and is given to the borrower as a receipt.

The weekly checking for overdues is simple when compared to the old system. The active file is checked once a week—each Monday after the filing of the last of last week's charging cards. The first step is to "needle" the cards for all books which have become overdue. For this the Keysort sorting needle is used with the alignment block which facilitates in getting the cards out in proper classed order. If the past week has been "Week 1," then the needle is pushed through the holes designated for "Week 1" on the card. Since these charges were clipped "Week 1" at the time they were

filed, all such charges left in the file drop in classed order, ready to be checked with the shelves. After searching for them on the shelves and in other likely places, the assistant then clips the holes for "Week 2," so that, if not returned during the following week, these same overdue charges will again drop when "Week 2" is needed for overdues the next week. Notices are sent to all student borrowers having books which have been overdue for as long as a week. Keysort has made this part of the work much faster, since the charging cards contain all information necessary, i.e., call numbers, authors, titles, and borrowers' addresses.

There was some doubt, at first, as to the feasibility of the divided classed file. The one-file system has definite advantages in discharging and checking for the location of a book not on the shelves. However, the divided file makes it possible to eliminate approximately half the cards to be needed each week. Since faculty charges are often for longer than the regular two-week loan period, these are placed also in the inactive file. All faculty charges are clipped at the hole marked "Faculty"; thus, it is easy to needle these out of the inactive file when the time comes to check. In a similar manner, all special collections are checked from time to time by needling out such charges from the inactive file. This includes all end of semester charges, mending, binding, and any special designations that have been made. Thus, the entire inactive file can be checked by "installments," eliminating the necessity for "tearing down" the whole file at one time.

Keysort has been in use for almost two years. Its one disadvantage is a certain clumsiness when a student's library record when withdrawing from school has to be cleared. At the college all students withdrawing from school must have a clearance record signed by the var-

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The Subject Ph.D. and Librarianship

ENTRY INTO THE FIELD of librarianship for holders of the Ph.D. degree in the various subject fields may be either fortuitous or by design. In the case of fortuitous entry, very often the new librarian has been teaching or has held administrative or research positions and because of an interest in some phases of librarianship, perhaps through bibliographical studies, enters the library field. His success or failure in this venture, from the point of view of professional librarians, depends on how well he is able to pick up the basic tools of his new occupation.

The other type of entry into the field of librarianship, entry by design, is generally made by the younger Ph.D.'s. The Ph.D. is a specialist's degree, and for the most part is considered training for college teaching, if for anything. Those who do not wish to teach enter other professions, such as industrial and private research, government service, editorial and abstracting work, and sometimes library science.¹ Some decide that their profession should be librarianship while writing their dissertations and thus are able to take the library school courses while still graduate students. Others come to the decision after they have taken the degree and enter library school for the necessary training courses at a later date. In either case, they follow the library school curriculum and emerge as professionally trained librarians.

The problem for the library school oc-

casioned by the presence of these holders of advanced degrees in varying subject fields is one that has become increasingly present and one that is not simple to solve.² The library school curriculum, especially since the schools became graduate schools instead of training institutes, is divided into two kinds of courses: core courses in the essential library techniques, and cultural or specialized courses in the wider field of librarianship. The core courses—bibliography, information sources, cataloging, classification and documentation—are the unique contribution of the library school. One cannot acquire more than a smattering of any of them anywhere else. They are essential to the training of a librarian. The cultural or specialized courses pertain to the educational, sociological, historical, public relations and administrative sides of librarianship and some of them could be omitted with no great loss.³ A course in research methods is mandatory for the student starting graduate work for the first time. The possessor of an advanced degree, on the other hand, may find it of dubious value because research methods are precisely what he has been learning during the three or more years already spent in graduate school. The same thing applies to some extent to history and theory courses. They are essential for the new graduate student, while the holder

¹ Lawrence S. Thompson, "Some Cultural Determinants of Scholarly Librarianship," *Library Quarterly*, XXIII (1953), 261-62.

² See, for example, W. Stanley Hoole, "Of the Librarian's Education," *American Scholar*, XIII (1944), 120; E. H. Wilson, "Advanced Degrees in Subject Fields," *CRL*, VI (1945), 269-70; Robert B. Downs, "Preparation of Specialists for University Libraries," *Special Libraries*, XXXVII (1946), 212; Harold Lancour, "If Librarianship Is a Learned Profession," *Library Journal*, LXXVI (1951), 1076; Herman H. Fussler, "Readjustments by the Librarian," *Library Quarterly*, XXIII (1953), 225.

³ Views of a somewhat similar nature recently have been expressed by Margaret Egan in her paper, "Education for the Librarian of the Future," at the Conference on the Practical Utilization of Recorded Knowledge, Cleveland, January 16-18, 1956.

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of a subject degree may be ready for more advanced work.

In addition to the possible factor of repetition in some aspects of the library school curriculum, there is the problem of the length of the whole course.⁴ A two-year library course leading to a master's degree in library science is too long for a person who has already spent three or four years in graduate school. By a little burning of the midnight oil, which will not really bother any holder of a Ph.D. degree, the core courses can be covered in one semester. For the other topics, perhaps advanced reading might be advisable, or graduate seminars.

The library school provides some very essential knowledge which the Ph.D., for all his lengthy training, lacks. His first important gap is in the use of reference materials. The location of source material, as taught in subject fields, usually is sketchy because emphasis is primarily on criticism. The student wastes much time making inefficient literature searches. After only one semester of information sources he is considerably better equipped for his research. His second lacuna is in using the card catalog. Here again the graduate student (and even his professor) has missed much and wasted a tremendous amount of time by not being able to find his way through the standard dictionary catalog. No instruction in how to use a catalog is half as valuable as knowing how to make one. This is important both for entry and in the use of subject headings. If the library course in reference and cataloging had come at the beginning of the graduate student's career instead of at the end, no doubt considerable time and energy would have been saved, particularly in gathering material for the dissertation.

The third weak place in the advanced

graduate student's technical knowledge is in documentation.⁵ Here, to some degree, specialists in various subjects, as documentalists, have attempted to fill in gaps in bibliographic control, and excellent subject bibliographies and other aids are available in many areas. But much remains to be done. The contributions to learning produced in this field demand highly specialized knowledge even more than library training, though the latter is also essential. The subject Ph.D., with the further addition of capability in library science, is ideally educated for documentation, and his interest in this field is advantageous if he prefers to be connected with a library in a research institution.

Most of the Ph.D.'s in subject fields, being academically minded, gravitate towards university libraries.⁶ Obviously they are particularly well suited as to background for the reference, bibliography and cataloging fields. A library director trying to secure faculty status for his staff finds it helpful to be able to point out that some of his people have the same academic background as the teaching staff. Furthermore, as subject specialists they fill needs connected with the development of specialized collections, and very likely it is as subject specialists that most subject Ph.D.'s may expect to find their forte in library work.

The subject specialist or scholar-librarian is, in a manner of speaking, neither fish nor fowl. Should his first interest be his subject or librarianship? And, as a corollary, should he expend his research energies on his subject field or on some

⁴ "Documentation . . . is that aspect of librarianship concerned with improving graphic communication within and among groups of specialists; it involves that portion of librarianship which treats of the materials and needs of research and scholarship, and hence it is particularly concerned with abstracting, indexing, classification, searching operations, compilations of bibliographies and similar means of meeting specialized information requirements." Western Reserve University, School of Library Science, "Program for Documentation Specialists," (Cleveland, 1956).

⁵ Thompson, *op. cit.*, 261-62; Robert B. Downs, "Are College and University Librarians Academic?" *CRL*, XV (1934), 14; Robert B. Downs, "Academic Status of Librarians—A New Approach," *CRL*, VI (1946), 8.

⁶ Wyman Parker, "College Library Personnel," *Library Quarterly*, XXIV (1954), 354; Downs, "Preparation of Specialists for University Libraries," *Special Libraries*, XXXVII (1946), 209-13; J. Periam Danton, *Education for Librarianship* ([Paris]: UNESCO, 1949), pp. 17-18.

aspect of library work? These are very real questions. It is important to the subject Ph.D. to be able to keep up with his main field of interest and to make contributions to it. Some professional librarians concerned with the matter assume that his occupational choice will predominate and hence one hears discussion as to whether he is better off with a Ph.D. in a special subject or in librarianship. Actually to be worth his salt, the *subject specialist's* first interest must be his subject.⁷ His first duty as a librarian is to his subject field. He has no choice in the matter.

The subject specialist's major interest in his subject is necessary to keep him abreast of current developments in the field. It is impossible to keep up to date in every area of knowledge. It is extremely difficult even to keep track of one's own branch. One must subscribe to the basic journals, attend conventions, read innumerable books, articles and reviews, following the literature as best one can with inadequate tools. What earthly use would a subject specialist be if he ceased acquiring knowledge in his subject the day he joined the library staff?

It is true that the scholar-librarian must keep up with the developments in library science, too, but here at least he can pick and choose, and concentrate on those facets of the field which are of the greatest use to him. Furthermore, literature in librarianship has one great advantage over that in his subject field: most of it, in the present early stage of development, is comparatively easy to understand. An article on the Library of Congress classification of rare books simply does not require the background for one on "The Place of the *Turba Philosophorum* in the Development of Alchemy," or "Fontana's Laws of Irritability." An exception to this comment is

necessary in referring to current work in documentation, some of which is highly technical.

When it comes to his own research, perhaps the subject specialist will be able to devise some combination of interests. Otherwise original studies in his own subject field would probably be more significant and congenial, and since much of this work must be done after normal working hours, he might as well have the pleasure of pursuing his own bent. The important point is that he should do something. As a scholar he has an obligation to do research. If he is merely content to sit back and "provide service" as a librarian, the Ph.D. has been a waste of time; moreover, the library which hires him is not getting the full value of his talents. The library should not be a refuge for those who are afraid of productive scholarship.

The subject specialist who wishes to escape from the academic world may find his niche in one of the myriads of special libraries flourishing at the present time. These libraries require talents and specializations of all kinds, particularly in the sciences. They offer possibilities for flexibility in administration and for experimentation impossible in more formal or well-established libraries. Many of the current interesting developments in cataloging and in reference work, for example, are coming from these libraries. The combination of subject specialization and library training is ideal for the special library.

In contrast to the subject specialist, the Ph.D. who enters the library field in another capacity not only has more choice as to his field of research, but also as to the type of career he wishes to pursue. The first and most obvious possibility is in administration. A large number of academic libraries still choose their chief librarians and major department heads from the ranks of the professors. The argument is that an ex-professor under-

⁷ Robert Kerner, "Essentials in the Training of University Librarians," *CRL*, 1 (1939), 33-34; Matthew A. McKavitt, "Subject, Method, Scholarship and the Library Manual," *Special Libraries*, XXXIII (1942), 359.

stands the needs of his erstwhile colleagues better than anyone else, and there is something to be said for this line of reasoning. A tremendous literature has appeared in library publications regarding the education and professional requirements for library administrators and specialized library personnel.⁶ The controversy over whether the "untrained" librarian does as well as one who has been especially trained for library work has by no means been settled. The possessor of a Ph.D. in library science is considerably better equipped for the special administrative duties connected with a library, but may have difficulty convincing the faculty of his academic sympathies. The Ph.D. in a subject field, who holds an additional degree in library science, has the advantage of being on both sides of the fence at once.

Other major fields of librarianship, notably reference, bibliography and cataloging, are also open to the subject Ph.D. In a library having subject divisions, he may spend his time in reference work connected with his own subject or in the broad general field of which his discipline forms a part. General refer-

ence also may be appealing because of the great variety of information encountered. Bibliographic work, which would combine his special interests and librarianship, may prove a happy solution. Certainly there is a great need for bibliographic studies, critical bibliographies, detailed indexes, informative abstracts and other research tools requiring a high degree of specialization on the part of the compiler. The cataloging field also opens a wide area to his talents. Classification and subject headings in particular are extremely difficult without considerable background knowledge. Perhaps the reason these subjects and cataloging in general are unpopular in library school is that most students lack the resources one gains through advanced study and cannot find frames of reference in the vast areas covered by the classification schemes. A person with an organizing type of mind may find cataloging even more rewarding than reference work.

Of all the types of library work available, the new discipline of documentation offers some of the most interesting possibilities for the subject Ph.D. who wishes to carry on research in a combination field of his subject and librarianship. Documentation is rapidly becoming of paramount importance because of the difficulty of recovering essential information from the constantly increasing mass of published material, particularly in article, report and non-printed form. The selection of subject headings and index terms and the construction of workable codes for mechanical selection are jobs for the specialist. When one considers the low retrieval factor obtained with present subject headings,⁷ for example, compared with the potential availability of material in library collections, the matter of getting data out of storage becomes a prob-

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⁶ Cf. Nathan von Patten, "Discussion," *CRL*, I (1939), 34; Louis R. Wilson, "What Type of Research Librarian?" in *Changing Patterns of Scholarship and the Future of Research Libraries: A Symposium in Celebration of the 200th Anniversary of the Establishment of the University of Pennsylvania Library* (Philadelphia: University of Pennsylvania Press, 1951), p. 115; Sydney B. Mitchell, "Libraries and Scholarship," *The Library of Tomorrow: A Symposium*, ed. Emily Miller Danton (Chicago: American Library Association, 1939), pp. 70-72; Charles E. Rush, "The Librarian of the Future," *The Library of Tomorrow*, p. 100; Downs, "Are College and University Librarians Academic?" *CRL*, XV (1954), 14; Lawrence C. Powell, "Education for Academic Librarianship," *Education for Librarianship: Papers Presented at the Library Conference, University of Chicago, August 16-21, 1948*, ed. Bernard Berelson (Chicago: American Library Association, 1949), pp. 136-37, 139; Bernard Berelson, "Advanced Study and Research in Librarianship," *Education for Librarianship*, p. 224; Carnegie Corporation of New York, *Report of Informal Conferences on Library Interests*, Dec. 8, 1930, Feb. 24, 1931, Apr. 27, 1931 (New York: Carnegie Corporation, 1931), pp. 46-47; Downs, "Preparation of Specialists for University Libraries," *Special Libraries*, XXXVII (1946), 209-13; Harry L. Lash, "So You Meditate a Ph.D.," *Library Journal*, LXXVI (1951), 149-50; Eugene H. Wilson, "Advanced Degrees in Subject Fields," *CRL*, VI (1945), 268-70; William H. Carlson, "The Doctor's Degree," *CRL*, VI (1945), 264-68; Harriet D. MacPherson, "Degrees as They Affect College Librarians," *CRL*, VI (1945), 270-71; Hoels, "Of the Librarian's Education," *American Scholar*, XIII (1944), 112.

⁷ Oliver L. Lilley, "Evaluation of the Subject Catalog: Criticisms and a Proposal," *American Documentation*, V (1954), 41-60.

Site, Seats, Selectivity

Some Thoughts on Planning the College Library Building

THE POSTWAR PERIOD has been characterized by ever-increasing enrollments in both colleges and universities. The period of general economic prosperity coupled with long-standing need has made possible the construction of an impressive number of college and university library buildings.

Since 1945 librarians and architects have written instructively in general and specific terms about library buildings. The literature in book and periodical form contains a great number of descriptions, charts, schematic plans, reproductions and reports. In addition there have been numerous special publications containing summaries of conferences and institutes devoted to discussions and criticisms of building plans.

All of these publications were primarily printed to inform and instruct librarians suffering from the seemingly endless labor and intermittent frustration that goes with planning new buildings or renovating old ones. Information in considerable detail, written with earnestness and honesty—though not always based on sufficient investigation—exists about modular and non-modular construction, flexibility, interior communication, wall treatment, lighting, equipment, floor coverings, paint, soundproofing and a host of other details that pertain to library buildings. The librarian who has read and digested the literature, and has attended the buildings institutes with some degree of regularity, has much of the

basic background necessary to plan a new building.

There are, however, some features of planning that need re-examination and a more considered investigation. Our thinking about function, about the most desirable site on which to build the library, as well as provisions for reader and book space seem based more on hoary tradition and blind acceptance of statements by buildings experts than upon contemporary need and student habits.

Since still more college libraries are being planned this seems an appropriate time for this inquiry. Attention to these important details may be the difference between an adequate functional college library building and one that is not only inadequate but inoperative.

DISTINCTION BETWEEN A COLLEGE AND UNIVERSITY LIBRARY BUILDING

It is imperative in planning a college library building for the planners to realize that a college library differs from a university, special or public library. (There are of course a few hybrids that perform both college and public library functions. We are speaking now of the relatively unadulterated college.) This apparently needless admonition is not an attempt at humor; it seems called for. The literature relating to buildings does not always clearly emphasize the various and quite unlike services performed by the several kinds of libraries. Because of the dissimilar functions each type must have different layout, plan and design.

There are those who have maintained that the college, public, and university

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library are only variant forms and that elements common to all three are more basic than the differences in designing the physical structure. Perhaps it is this doctrine that is responsible for confusion in the minds of some library planners. It has led to the incorporation in college libraries of unnecessary and expensive features of dubious value to the college.

It cannot be denied that all types of libraries have common elements. All have patrons and give service on printed and other materials. There is, however, a noticeable dissimilarity in the aims and primary functions, particularly of the college and university library. College library services are limited by the very nature of the educational program of the college. No such limitations apply to the university. The ideal college library should reflect and implement the educational objectives of a particular college. It should not reflect primarily the professional zeal and ambition of a librarian who is confused about the nature of his calling.

SITE

Customarily the college librarian is not solely responsible for selecting the site for the proposed building. Administrative officers and trustees, who have up-to-date and intimate knowledge of student habits and customs, usually make the final decision. If the librarian can influence the choice of site, a wonderful opportunity is presented to build the library where it will better serve the students without changing their normal habits of daily life.

For many years authorities have advised that a site should be selected "readily accessible from recitation halls" or "near the center of classroom and study," or as near as possible to the "classrooms in the social sciences and humanities." The expressed reasons for advocating such a location is that students rush from class into the library or that increased short-time use is made of the library dur-

ing the intervals that normally occur between classes. It is also handy to have the library near classrooms so that students may return books between classes.

It can be seriously questioned whether such a location serves the desired purpose. If the college library is located primarily for the convenience of the students, and it should be, a site near that part of the campus where the students spend the greatest part of their waking hours, free of classes, would seem most desirable. Since, on the average, a student spends only fifteen hours each week in classrooms, and perhaps an equal number of hours between classes, the instructional or classroom area cannot be regarded as the center of student activity.

Observation of students, I believe, will reveal that they spend a great amount of their out-of-class-time in the student union, or activities center, and in the housing or dormitory units. A library on a site midway between the housing facilities and the student union would appear to be the preferable location. Such a location would be most advantageous for students who have developed the commendable habit of studying at night and on weekends, free from the interruptions occasioned by classes.

There are colleges that have purposely built men's housing facilities on one side of the campus and women's on the other. Since the mutual attraction of male and female at the college age is fairly constant, the student union becomes the center of much social activity at such a college. The ideal location for the library at this college would be near this gathering place for students.

SEATS AND ENROLLMENT

The enrollment increase in institutions of higher learning is expected to reach flood-tide proportions by 1965. Estimates by educators vary, but average calculations call for a doubling of 1950 enrollments by 1965. Educational facilities must be stretched to serve this bulge of

students. Some colleges will increase faculty and expand physical plants to admit a larger number but many will have only limited expansion; a few will hold the line at present levels. Some institutions have already faced this issue and announced their policies.

While it may prove difficult and impossible in some instances to get administrative decision on enrollment expansion it is an essential preliminary step in planning a new building; for the seating capacity, as well as other features of a library building, are directly and inseparably linked with enrollment. In planning the total number of seats the traditional professional dictum has been that space for 30, 40, or even 50 per cent of the total student body should be provided. Thirty per cent is usually regarded as a minimum.

Explanations as to how a ratio of seats and students is arrived at are weak, uncritical, and in some instances nonexistent. Sometimes such factors as "teaching program," "day students," "honors work" are considered. The following paraphrased explanations have been offered in defense of seating requirements. "We need seats for 30 per cent of our student body because our students attend classes six days a week." "We must plan to seat 40 per cent of our students because cars are prohibited and our students must ride bicycles." "Our tuition is higher than in most colleges, therefore we plan a seating capacity for 50 per cent of our student body." The implication is that there is a direct correlation between six-day classes, absence of cars, tuition, and library use.

Perhaps this great emphasis on seats and the desire to have a sufficient number can be explained by the fact that reader space in many colleges has been totally inadequate. There is danger of overdeveloping this aspect of the college library to the neglect of other features.

Seating capacity should be related to

the size of the student body as well as to the educational standards and the teaching methods of the college. In planning space for readers, a survey of all study facilities of the college may prove of value. Facilities available in dormitories and elsewhere should be included as serving the over-all needs. Since a varying percentage of students use library seats to read their own texts, any space outside the library can meet this requirement. Indeed it may be cheaper to provide such study hall space outside the library. Use factor of present library facilities should be charted over staggered periods. The results may reveal that seats have maximum occupancy for only 100 to 300 hours during a given semester. The question then arises whether to plan for normal occupancy or for maximum occupancy which occurs for relatively short periods each semester. The results of a local survey should reveal the approximate seating capacity needed. With information on enrollment trends a college can provide reader space for local use without attention to space provided at colleges with similar numbers of students.

There is no real tragedy nor lasting educational sin committed by occasionally denying a student the privilege of a seat in the library. The vital, all-important feature of library services is to provide the student with the book. Books can be read, contents can be digested, and a mind can be inspired and encouraged in a number of places not mentioned in library literature as study facilities.

SELECTIVITY—PLANNING THE BOOK CAPACITY

The size of the book collection must be considered and the annual rate of growth anticipated or estimated when planning the building. We have been told that the book stock of college libraries normally doubles every 13 to 22 years. There are, of course, exceptions to this

general rule. Space for books is often provided according to a formula: The college has x volumes now. It will grow at the rate of y volumes annually. Space for 20 years' expansion is desired. $x + 20y =$ estimated size of the book collection in 20 years. $z =$ total square feet of floor space for book storage.

Such planning for book storage in a new building is not only expensive but unrealistic. It should be obvious that there are books of unequal educational value in every college library. The keep-every-book-that-comes-to-the-library philosophy has made and will make many of our college libraries storehouses for thousands of volumes that are practically useless in so far as they relate to daily student and faculty need.

It should not become a function of the college library to store books as a mere act of preserving the accumulated knowledge of mankind as it is represented in print. Nor should it become obligatory for the college to keep books that may be needed for research in the distant future. Interlibrary loans and the general availability of research material through photographic reproductions can in part satisfy the latter demand. The college collection should contain the best of the useful scholarly books, books that are alive and in demand because of the current curricular needs of the college. Accumulation and storage belongs in the domain of the university and research library.

Maximum size of the college book collection has been discussed frequently in the past. It has even been suggested that a numerical limit be placed on the gross size of the book collection, discarding volumes no longer in current demand when the top figure is approached. Though this has been suggested it has not been considered seriously and, to my knowledge, is not practiced by any college. A few colleges have discarded at intervals old texts, patently useless books

and duplicates no longer needed in multiple copies. Perhaps weeding if done faithfully and regularly can arrest growth. It is not practiced more widely, we are told, because of the expense involved in withdrawing books. This seems a sad commentary on our efficiency and might indicate that as a profession we are hamstrung by records.

The time is not yet appropriate seriously to consider placing an arbitrary limit on the size of the book collection. We still are in a competitive period and most of us believe in the magic of numbers. Some college authorities take pride in advertising the largest college library in the country, the second largest west of the Mississippi or the largest south of the Mason-Dixon line. If these authorities could be shown what these boasts cost in dollars and cents and how minor a role numbers of these volumes play in their educational program, enthusiasm might be less noticeable.

Since it would appear impossible to set a limit on the size of the book collection or to practice judicious weeding, it would appear economically wise for the college with a substantial number of little used volumes to consider two methods of shelving for the books in a new building. Those books for which there is little current demand could be placed in compact shelving in a part of the building finished at low cost. If they must be kept, use factor would dictate that they be stored at a minimum cost to the institution. This is essentially the storage library idea on an individual rather than a cooperative basis. One college library has used the basement of an adjoining building for compact storage. When a new library is built, it might be possible to use part of the old library quarters for this purpose.

The active or frequently used collection could be shelved in the most accessible manner. There seems to be positive educational value in putting the user

and the book together without barriers. The "good" or "alive" books could be made freely available to all patrons. At periodic intervals books in this collection should be retired to the "dead" collection. Similarly books from the dead collections could be reactivated if in demand.

CONCLUSION

Many college libraries erected in the last decade contain poetry rooms, listening rooms, rooms for group study and conversation, microform rooms, browsing rooms and lounges. All of these rooms were designed to further the educational value of the library. It is encouraging to see the college library become a sort of

second home for students. One cannot quarrel with these features if they are needed and used. But the feeling persists that many of them got in quite a few building plans by no other process than that of imitation. In planning a college library the first and only obligation is to provide those services which are needed on a local level without any thoughts as to what is currently in mode nationally or professionally. A college is a unique institution, and in spite of the pressure for educational mass production and standardization, each college differs from all others. The college library must play its role within the framework of this institutional individuality.

Punched-Card Charging System for a Small College Library

(Continued from page 122)

ious departments, including the library. Since the only record for Keysort library charges is the classed file, it is still necessary to check through the entire student part of the classed file. This cumbersomeness can be eliminated by clipping each day the initials of the borrowers' last names, which would thus reduce such checking to one letter of the alphabet, which could quickly be needed. However, thus far, withdrawals have been so few that the additional clipping each morning is not justified. Withdrawals average less than one a week, and, by actual record, the average time for checking a withdrawal is 10 minutes. The extra time, which would be spent if the initials of borrowers were clipped during the morning routine, would be much more than this.

As stated earlier, at first the Keysort system was accepted on a two-year trial basis. After having used it for this period, its advantages and possibilities have become evident. Because of the complete borrower information given on the charg-

ing forms, errors have been greatly reduced, and, when an occasional error in call number does occur, author and title are still available as guides. The entire circulation procedure under Keysort consumes much less than half the staff time used with our old charging system, and such a saving as this compensates many times over for the rather expensive charging cards. Also, by dittoing the backs of the cancelled charging forms, satisfactory charging cards for magazines which circulate for overnight only are available. Just recently it was decided to rent the desk model groover from McBee. The use of the groover is an economy in time, since, with that, many more cards at a time can be clipped than with the hand clip that was first used. Reprinting of cards on which no changes are made can be done from the same plate, and these are less expensive than the original printing. Keysort has been so satisfactory that we are planning to take it with us in our new building which will be ready in a few months.

Dreams and a New Building

DO YOU SOMETIMES SIT AND WONDER what you would do if you were to have a new building and could plan it as you wished? Do you drift quietly off to sleep full of ideas about how wonderful it would be if you could only get out of that old firetrap you work in and could see yourself in a bright and shiny, new, efficient building? Do you find you wake in the morning having solved in the dark recesses of a night's sleep all the problems of this building which you have created between 4 and 5 A.M.?

Well, perhaps you should have a new dream. Do you know what problems need solving; and do you know that a new building doesn't solve your problems? It only gives you an opportunity to think about the ones you have, and offers many more to wonder about.

What are the problems librarians think about, whether they are in an old library and must make do with what they have, or are about to embark on the great adventure to find new ways of giving excellent library service to students—or to other clientele?

General Problems

It is not the concern of this paper to outline the philosophical implications of library service. It may be assumed that by the time a new building is thought about that there is general campus enthusiasm for it and that sincere consideration has been given to the basic reasons for providing good service.

As you think about this new building, is it clear what your role in the planning process is going to be? Are you going to

be on the advisory committee which works toward putting a program down on paper and then submits it to an architect? Can you show that your building will be better if you are part of the planning process, even if you feel that you do not know all you wish to about library buildings?

Who will decide whether you wish an outside consultant? You will undoubtedly feel a little lost as you begin planning and will want someone to talk to about your ideas. Is a consultant—one who has had rather extensive experience—of help? He might give you ideas with which you will disagree and therefore you will have to work hard to defend your own—or he will convince you. Can he serve to test faculty and student reaction to various ideas current on your campus? Almost always a consultant is a busy person, interested in being helpful but in need of specific directions as to what is wanted of him. Do you want him for a day or a month? Do you want him to do plans or only assist in formulating a library program which can later be developed into plans? Is his relationship clear to you, to your administration, and to the architect? Do you know exactly how you can handle the finances? Consultants should be adequately paid. Will you want your consultant only in the early stages of a building or will you want him to see the building to completion?

If one consultant serves your needs for the basic building, what will you do when it comes to colors, furniture and equipment of various kinds?

With your role and that of a consultant clear, are you ready to start on the building? Are you to have a divisional arrangement? Much has been written on

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the subject, and you can find examples to study so that you know how it is thought to work out in other institutions. But do you know *why* it should or should not be used in yours? Perhaps it seems good sense from the library administration standpoint, but is that a good enough reason? Is there something about the way your institution is organized which makes it logical to have divisions in the library? You may well come out in your thinking with the need for, let's say, a humanities division, a science division and a social science division. Can you tell from the way students take courses, or from the way the literature appears, that such a scheme has real merit for you? Or would it be more sensible to have an undergraduate library, a general library, and a research library all separate within your building? Or possibly a combination?

Do you know whether you are going to urge very strongly that the new library be a centralized library, or are you going to want to maintain departmental collections in various places on the campus? If there are departmental collections, do you know whether you can afford to staff them, and what size they should be before staffing is necessary, or how many volumes make a working collection which a departmental secretary can successfully look after? If some departmental collections are to be expected do you have a pretty good idea how much duplication is going to be advisable, or financially possible?

What are you going to be able to say about the advantages of a closed or an open stack—or are you going to have a stack area at all? Some recent buildings are arranged on a divisional plan, but in connection with these divisions there is a central stack core. If you have completely open stacks, are you going to have enough money to hire students to put books back in order—and keep them that way?

And from the beginning you are going to be faced with financial problems, not only connected with the building itself

but with all aspects of what the new building makes it possible for you to do. So far as we know, every new building increases the demands made on the library and enlarges its sphere of operation. Will you need new staff and new services? Can you spend the money needed to make this new building work for you better than the old one? Can you improve your routines and equipment—which you would always liked to have done anyway—so that you have an efficient but personable operation where people can get what they want when they want it with few obstructions put in their way and every effort made to have things as simple and straightforward as possible? As your services increase and the requests for longer library hours are heard, can you staff the building easily with only a few people at a time?

Public Services

If it is assumed that you will have a divisional arrangement—and the assumption is made not necessarily because this is the best way of doing things but just because it is one way, and you have to start somewhere—what kinds of services are you to provide in the divisions? Will you want to have a central reference department, perhaps similar to what you now have, or would it be better to have the reference work carried on by subject specialists in the divisions? If you do not have a central reference department, you may need some information service quickly available near the entrance, you may want to give some assistance in the use of the card catalog, and you may want to have your bibliographical section conveniently near the cataloging or technical services offices. Can you do all this, and, if not, which need has priority? And what do you do about the requirements of departments or schools which cross divisional lines? And where do you put reserve books?

It may be possible to work out, without too much stress and strain, the details of

giving good reference service wherever it is needed in a building. An equally important question is the location of circulation points. You will also want to consider where book-return boxes from the outside can be located.

If you are going to do at least some reference work in the divisions, you may then ask whether each division will also circulate its own material and keep its records, or whether there should be a central circulation area for all service.

Once the circulation desk or desks have been decided upon, the charging system must be selected. What is desired is a method which does not take time for preparation in technical services, does not delay the borrower by much written work, eases the load at the circulation desk when books go out, and is simple to use in discharging books so that those which have been returned may go at once to the shelves. In addition you may want to know who has what book and when it is to be returned, and you may want to take reserves on books in circulation. Does such a system exist?

It will be necessary, however, to determine whether the records from a decentralized circulation process should be brought together in one place or whether those from a centralized system should be duplicated in the divisions. An arbitrary decision may be the only way, but there will be many requests—probably most frequently from the staff—to see that duplicate records are available. A good deal of thought must be given to the problem of duplication wherever it appears, for some of these requests may be expressions only of a familiarity with how things have been rather than of a need under a new method of operation.

Arrangement Within Divisions

The assumption has been made that a divisional arrangement would be followed in your new library—and although this may not be necessarily the right assumption, it is a workable one, and, if it

is made, certain problems develop which must be solved. What, for instance, should be the arrangement of the material within the divisions? Frequently it happens that there have been departmental collections or branch libraries, and a new building may encourage some or all of these outside collections to be housed in the new building. When they are brought together, should they be housed as separate units as they were when they were in different places on the campus? Many departments may like this for they will feel the same close ties to their collection—and to their librarian—that they have had. Is this the best arrangement that can be devised, or would it be more satisfactory if each division was known to contain certain parts of the classification scheme? If there are existing branch libraries, when a move to a larger building is made it may be discovered that each of them has books from all parts of the classification scheme. Should these somehow be maintained within the general subject area where most of the books from the branch are shelved, or should they be put where they fall in the classification schedule, with a concerted effort made to inform people what is taking place? If various classification numbers are to be represented in each division it will be evident that the cards in the catalog will have to bear location symbols. The decision as to whether this is advisable or economically wise will have to be made fairly early in the planning process.

It will soon be evident even with a divisional arrangement that not all materials fall within the divisional framework. What of recreational reading, for example? Do you believe in browsing rooms and do you want to make some "general" reading available?

So far the emphasis has been on book materials, but other groups of material are crying for answers to problems which they raise. What should be done with periodicals and documents? Is it better to establish a periodical room where all

serials are shelved—and possibly arranged alphabetically by title—or is it much more satisfactory to have that kind of material classified and arranged along with book material in the same subject? Perhaps these questions can only be answered from a historical standpoint. If a library has classified its periodicals there may be no reason for changing to an alphabetical arrangement; if on the other hand the arrangement has already been alphabetical there is doubt as to whether it is worth while to classify. Only when there has been a mixture of the two, and perhaps inadequate records in addition, would it be advisable to get all of them in one arrangement or another. Actually, of course, there is another possibility: to arrange serials of a given subject alphabetically by title and house them in a separate part of a division so that periodicals are near their subjects but still separate and alphabetical. If serials from all the library's divisions are to be separate and alphabetically arranged, then space must be found for them apart from the divisional arrangement.

With documents, the situation is both different and similar. Are documents—and here is meant not only United States government publications, but United Nations documents, publications of foreign governments, and documents from our own states—to be classified in the library's classification and shelved along with all other material? We must consider their number, and the means which have been provided for getting at them. There is an argument for relying on printed indexes and on prepared classification schemes which must be carefully weighed as the decision is made to shelve them separately or with other subject material. Is the Superintendent of Documents classification to be used, or will some material be maintained in the library's general classification scheme? How much of this material should exist?

Is the map collection large enough to have a separate room, or can it be ab-

sorbed by a division? Are horizontal or vertical cases to be preferred for the maps, and how thick should the drawers be?

Technical Processes

Some of the previous matters have been called "public," but it is clear that they have technical aspects also; and in this section, though it is labeled "technical" there will be items which will have public connections. It is hard to separate clearly the two and to identify them distinctly. There is general agreement that the basic aim is public service and that the important things which go into the technical work are aimed at improving and expanding that public service and are not—and should not become—ends in themselves.

A vital decision must be made early in planning for the new building: Are you going to maintain your present classification system or is this the time to do something drastic about its shortcomings? Much of the final decision may be made on financial grounds, but the advantages of some new classification may be more theoretical than real. It is fair to say that no classification scheme has or will ever be devised that is entirely satisfactory to all people who use it. It may therefore be not only expedient to save what you can by not changing schemes but it may be even wiser to use to the fullest extent possible the advice you pay for on Library of Congress cards, and go more and more in the direction of thinking of the classification system you use as a reasonable guide to your collections and not as the perfect scheme to guarantee that all your material on a subject will be shelved together.

What about the technical departments themselves? Are you going to have all your departments combined under one head, or at least located in one area of the building? Where is that area to be? Traditionally it has been thought necessary to have it adjacent to the public card cat-

alog and preferably on the first floor of the building. It would not be hard to show examples of where it has been placed elsewhere without dire results. It is true that the acquisitions and cataloging staffs use the card catalog frequently and need easy access to whatever they are using. But it is important to be sure that some vital public service is not being slighted to make possible the juxtaposition of the card catalog, the bibliographies, and the technical processes department. If all can be accomplished together, everyone concerned will be contented. If it cannot be, it is possible at least to consider placing public needs above staff needs, particularly if other staff needs can be met by some other combinations.

Has it been decided that all cataloging will be done by the cataloging staff alone, or is some arrangement being considered whereby the advice and assistance of the reference staff can be used? Have we become too departmentalized and should some combination of library duties be considered?

What kind of catalog is going to be needed: a union catalog for all the building (and should this be divided); additional catalogs in each division (and need these be dictionary catalogs or would an author one suffice)? Should the catalog contain all serials entries? This serials problem is a very tough one because the bulk of the material is so great, the need for accurate records so important, and the complexities of the material so enormous that one's first reaction is to have as many records as possible because it is so difficult to tell what will be needed. Does the library need complete records of its serial holdings in more than one place? If so, should these records be in the catalog and in the shelf list? Should there be one complete record of past and present serials with no record in the public catalog? If so, how can this one serials record be served? Does the existence of open or closed stacks have an influence on this decision? Can the divisions get quick and

accurate information by telephone to a central file, or is duplication essential?

The responsibility of the binding department in looking after all materials in the divisions is of direct concern. Shall it be the binding department's job to pick up and send to the bindery all divisional material, or will the divisional personnel have that responsibility? Will the binding department be so closely related geographically and administratively that it in effect becomes an integral part of technical processes and assumes the task of pasting and plating and marking?

How much book-marking is done in the library? We mark the entire call number, of course, on the back of the volume. Has it yet been proven that we need an author or Cutter number as well as a classification number? Or do we keep it as part of the cataloging routine only because it has been so long a part of it? We need to question its place in academic libraries, particularly since its primary function is one of identification and since public libraries have been identifying their books for years without it. And why have we not made it possible to read classification numbers by marking in really big numbers and letters?

Finally, as we consider technical process problems, what about a receiving and shipping area? Has it been located correctly on the lowest level of the building, so that material comes directly to it on receipt and is then directed away from it in one general direction without duplication of movement; and does everything going out of the building funnel through it from all parts of the building? Is it big enough? Is it closely related to a supply room? Who handles supplies so that they are well inventoried, correctly ordered, and available on short order whenever they are needed? Is the storage area big enough?

Details—Miscellaneous But Not to Be Forgotten

There are many things about a new

building that do not fit conveniently into any category but which need to be considered. Though apparently unrelated either to the more general outlines of the building or to each other they are significant and should be mentioned one by one.

Module size.—Currently it is fashionable to build according to the modular principle of repeated units the same size in order to gain flexibility. But what size should the module be? A quick review of recent buildings reveals such a wide variety of sizes that it is bewildering to know. Theoretically a library will want a module these were arrived at—and why, rule of a size which will accommodate standard items: shelving, furniture, floor tiles, acoustic plaster, lighting fixtures, air ducts and lighting outlets. But how many module sizes do this? A little study with a slide rule should reveal the best possible size—or sizes—but this has as yet not been done with definitiveness. Someone might devote himself to this question so that we will know what we should be aiming at.

Ceiling heights.—Take a look at some recently constructed buildings to see whether you are satisfied with the distance between floor and ceiling in the various rooms. Possibly a uniform floor height throughout the building is advisable; perhaps you will want some variations between adjoining rooms. If so, remember that this must be compensated for in some way when considering the building as a whole. You may be surprised to see that ceiling heights only slightly over 8 feet are not impossible even in a large area. But heights up to 9 feet may be more acceptable, and more spacious looking. Do you know whether the same ceiling height is possible in a basement room with no windows as in a main or upper floor room with more extensive views of the outside world? Sometimes ceiling heights are influenced by the type of lighting fixtures. A fixture flush with the ceiling may make it possible to have a slightly lower ceiling because less space

is taken by the fixture itself. Is this a fairly good rule to consider: a ceiling high enough so that one does not feel cramped and low enough so that not too much space is wasted?

Mezzanines.—The question of floor heights suggests mezzanines which can serve as a means of heightening a ceiling in parts of a room while making interesting use of other space. Some of the handsome new buildings have made effective use of mezzanines and have enhanced the attractiveness of the interiors. Several questions should be raised about them, however: Do they make as good use of space as would be the case if they were complete floors; do they confuse the reader; do they cause separation of parts of the collection in such a way that a logical pattern of shelving is difficult; do they cost more or less than a different construction; do they increase the amount of space available without cutting it up with an elaborate array of concrete or steel supports? Do we know how thick a mezzanine floor should be and how this thickness is influenced by lighting fixtures now or in the future; or do we know what proportion of a floor should be in mezzanine before one is advisable?

Air conditioning.—Do you know accurately what air conditioning would cost? Can you make a decision whether to have it in a building of the size needed, or must a smaller building be erected if air conditioning is to be included? Are you sure that a smaller air-conditioned building with possibility for later expansion would not serve better in the long run?

Flooring.—These days there are a number of choices in materials for library floors. Do you want yours quiet and expensive, medium-priced and shiny, relatively inexpensive and rather hard? Apparently the day of the wooden floor has passed into some never-never land—which may be just as well, for it was somewhat difficult to maintain and was somewhat hard, but given a little care it certainly did last. Now, except for lobbies

and stairways where terrazzo is often used, we seem to have a choice of various tiles. They vary tremendously in price and durability, and they come in a number of patterns. So far there does not appear to be a flooring as quiet as foam rubber or carpet, as durable as plastic tiles are expected to be, as handsome as wood, or within a price range we can afford—and one is needed, not only in libraries, but in public buildings of all kinds.

Variations in the costs of flooring may come as a surprise. One type of flooring tile is four times as expensive as the cheapest, and even it has its very serious drawbacks.

Shelving.—Today there are several types of shelving available, some slotted, some bracket type. Is each interchangeable with newspaper or study shelves, and is each easily installed? Is some provision made for pamphlets and recordings by the use of shelves which will accommodate upright supports at intervals?

Communication.—How are you going to get information from one place to another, and how are you going to move materials? Will dial telephones serve all the needs you have, particularly if some of the instruments are fitted with several lines, or do you need an intercom system? And how are you going to get books back on the shelves—or off them if you have a closed stack arrangement? Perhaps book trucks will move materials around fast enough, but you may have to consider mechanical conveyor belts, particularly if books circulate rapidly and you do not have enough student assistants or book trucks to get books back to the shelves before a crisis has developed at the circulation desk. Be sure your pneumatic tubes are big enough to hold a reasonably large piece of paper or card stock, and be sure you have estimated carefully the load your tube system will be called on to carry. It is as easy to find libraries which have tubes they no longer use as it is to find others with tubes too small in diame-

ter going to too few places and taking too long to carry out their job.

Elevators.—Related to the transmission of messages and books is the problem of making it easy for your patrons to get around the building. Do you know how many people you will have in your library? Can you be sure that the one elevator which may fit your budget is anywhere near adequate? Is it possible to make a space for additional ones even if the actual machinery is not installed at the beginning? Do escalators have a potential use, even though none has yet been installed in a library?

Lighting.—We have come a long way from the days when a single unshaded light was considered adequate, for now there are in some office buildings continuous and totally luminous ceilings. Libraries may not yet have arrived at this point but there is much we can do to fit in between the extremes. How can we make plans so that the lighting once installed is not so rigid that it determines the use to which parts of the building are put?

If fluorescent lighting is chosen for a building, we must ask our lighting consultant whether a line of single tubes is satisfactory or whether a double line must be considered because it gives more light and reduces flicker, which can be irritating, if perhaps not very important.

An unsolved lighting question is how much is needed. It is sometimes said that the amount is not as important as the lack of glare or the degree of contrast. These must all be taken into consideration, for lighting should be adequate, uniform and universal. Some say lighting of 18-25 foot candles is fine; others prefer nearer 50. Probably whatever you use will be more than in your present building, but will it be enough?

A general light switch by the front door for building light control has been recommended to eliminate the long time need to shut out all the lights. We should ask the lighting engineers to agree on one point: Should fluorescent lights be turned

off after each use, or is it less expensive to leave them on once they have been turned on?

Furniture and equipment.—Is the furniture going to be durable, colorful, in the right price range? It almost appears that all libraries built recently look alike, because the furniture is about the same. Can we use furniture from other sources to advantage? Who is to help in this selection? Perhaps we cannot ever satisfactorily solve our problems of equipment and furniture, but let us be alert to the possibilities of delay in manufacturing so that our orders are sent in time to guarantee delivery.

Exhibits.—New buildings provide an opportunity—and a temptation—for exhibit cases. Can these be filled with good exhibits, frequently changed by an overworked staff, or should the number of cases be held to a minimum? Where do you prepare for exhibits, and store exhibit materials?

Photography, radio and television.—You can be sure that if you have had photographic facilities in your old building you will want some in the new one. But how much? Do you want to be able to microfilm newspapers, and then make prints from the negatives? Will you need to make slides or filmstrips? If you do not need them now, can you be sure that you will not need them in the future? What about the quick copying devices for letters or other material which you need in multiple copies? What of catalog cards—should they be reproduced on a typewriter, on a fast-running copying machine which uses stencils, or by some other means?

How do you feel about a collection of recordings, and how are records to be used? Some may be charged out, some may be used in classrooms, some may only be available to users of the library building. Are you to have listening rooms, and how many? Are you to have tables with headphones?

Are you having the library wired for

sound so that announcements can be made throughout the building, or music played in more places than the listening rooms? What about television? Is closed-circuit telecasting active enough so that you will want to be prepared for it? Or will you want only to provide for receiving commercial television?

While you think of these subjects you will want to review the whole question of audio-visual materials. Is your institution going to be more and more interested in such items, and is the library a good (or the best) place to administer them?

Windows.—Has it been decided what function windows really perform? Are they needed for ventilation, or to prevent claustrophobia, or for the appearance of the building? If the building is to be air conditioned, it is often more expensive to have windows than to do without them. Is it worth something quite specific to have windows so that an already existing architectural pattern on a campus may be maintained, or so that the so-called psychological advantages of being able to see outside can be realized?

Conveniences and special needs.—What kind of lounge facilities are to be provided? Will the staff need a separate area for their lunches or can this be combined with a general lounge where faculty and staff can meet regularly and where special functions may be held? Do you need a kitchen?

How many washrooms are to be provided, and is it too much to want facilities on each floor? What about the new plumbing for the women's lounges?

Where is smoking to be permitted? What influence does air conditioning have on this decision?

Will study rooms be provided for your faculty and for graduate students? What proportion of your total seating capacity should be set aside for reserved use of this kind? Are these rooms to be assigned for a specific length of time—and what is that time? What of lockers in various places in the building? Should these be

operated by keys, or do coin lockers serve as well, particularly if the mechanism is of the kind in which a coin operates the lock but is returned to the user?

Where is typing to be permitted? Can furniture and shelves be arranged and areas made sound-absorbent enough so that typing can be almost universal? Are separate rooms much more satisfactory?

Signs.—Have you faced the question of how you will direct people around your new building? Are signs going to be relied upon, and how do you make them so that they are prominent, attractive, inexpensive, and quickly produced?

Moving.—Do not forget that provision must be made for moving into your new building. One can hope that this will not come from your building budget, but it must come from somewhere—and it may be a considerable item. Can you plan ahead enough so that you do not get

caught short on this important operation?

Coordination.—Your building will not get built by itself. You need constant consultation, advice and encouragement. Can a way be devised so that during its construction you have regular meetings with your architects, contractors and subcontractors? They will need your help and you will need their knowledge and detailed information.

A multitude of other questions must be asked and answered before your building is complete; but this should serve as a starter on the way to get some of them answered.

P.S. We are getting a new building—or had you guessed? Our answers to some of these pertinent questions may not prove to be the same as those for other institutions, but we are hopeful that they are suggestive.

New Union List of Serials in Prospect

The Rockefeller Foundation has made a grant of \$6,000 to the Library of Congress to permit the Joint Committee on the Union List of Serials to develop a new union list program. The aim is a permanent and self-sustaining union list of serials.

Wyllis E. Wright, who is librarian of Williams College and who for fifteen years was chairman of the Joint Committee, will spend the next three months, largely at the Library of Congress, carrying out the basic investigations. The new program is necessary because editing and publishing costs, plus the expense libraries must face in periodically checking their holdings, make further editions of the *Union List of Serials* along traditional lines almost prohibitively expensive. Also the Joint Committee is aware that other union list activities deserve attention, especially in those areas in which some publication has already taken place (foreign government publications, international congresses, American newspapers).

The general goal is to establish at the Library of Congress a union catalog of serials. From this catalog union lists of various kinds—alphabetical, subject, country or region, etc.—could be produced systematically. The work would dovetail with *New Serial Titles*, whose first five-year cumulation, published last year, represents a stage in the union list program. At the same time the Joint Committee is exploring ways of keeping the existing *Union List of Serials* in print in some form, preferably with some changes and additions.

By LOUIS KAPLAN

Sources for the Study of European Labor and Socialism (1840-1914) at Wisconsin

HISTORY OF THE COLLECTION

IN THE LAST TWO decades of the nineteenth century, the universities of the Midwest began to organize themselves for the advanced study of the social sciences. In 1892, as part of that development, there came to the University of Wisconsin a German-trained economist, author of a book on French and German socialism, Richard T. Ely. Because Ely was a man of considerable reputation, inducements were necessary to snare him, and among them was a special fund for books—the then “unheard” of sum of \$5,000. Another special fund of \$2,500 was made available to him about ten years later.

By the time of Ely's arrival, European labor unions had won the critical battle of legal existence; Marx had organized the “International”; and such leaders as Fourier, Owen, Proudhon, Lassalle, and Bebel had won a place in history. Much had been written by these leaders and their lesser colleagues, and some of it was already difficult to procure. Thus, though the funds placed at Ely's disposal may have seemed considerable at the time, there was not enough to make up for the lost opportunities of the past. Nevertheless, Ely succeeded in directing into the library a considerable body of source materials, including a fine collection of the writings of Robert Owen.

In 1904, John R. Commons arrived on the campus to begin his work on the his-

tory of labor in America. While in the East, Commons had made the acquaintance of William English Walling. Walling, the son of a prominent and wealthy family, personable and widely acquainted, was a tireless worker in the socialist cause. A voluminous writer, he knew his way in the world of books. In 1907, as the result of his relationship with Commons, Walling presented Wisconsin with about 200 books, mainly on the subject of French and German socialism and labor.

In 1909, Walling sent Selig Perlman, a young student he had met in Italy, to study under Commons at Wisconsin. Later, when Perlman was to become a member of the faculty, the library collection was to benefit greatly from his wide knowledge of the European scene. At the moment, Perlman's contribution was to bind further the ties between Walling and Wisconsin. The stage now was set for a stroke of great good fortune. In New York, there came on the market the extensive collection gathered by Herman Schlueter, historian and editor of the socialist *New Yorker Volkszeitung*. Walling purchased the collection and gave the American portion to the State Historical Society and the European portion, consisting of no less than 600 titles, to the University.

The European portion of the Schlueter collection pertained mainly to Germany and to the First International. There was a wealth of material on the German Social Democratic Party, including minutes of meetings and election handbills and posters. On the revolution of 1848

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there was a considerable body of contemporary pamphlets, books, and periodicals. Also impressive were the periodicals of later years, particularly those published in the seventies and eighties, which, like those of the forties, are to be found in few American libraries. Of the books written by important socialist and labor leaders of Germany there was a gratifying array. A group of socialist song books was also in the collection. And as a dash of spice, there were the books of about seventy literary figures whose novels, essays, and poetry could be characterized as socially progressive. But one would search in vain for materials pertaining to individual labor unions, for seemingly Schlucter was interested only in books that dealt with theory and the problems of political organization.

By 1910, Ely's chief interest was no longer in socialism. But by virtue of the connection between Commons and the American Bureau of Industrial Research, gift materials continued to come to Madison, either to the library of the University or to that of the State Historical Society which in those days was responsible for both American and British materials. Among the noteworthy European sources that were acquired as the result of the activity of Commons and his associates were the publications of a considerable number of English labor unions.

In the twenties and thirties the University library suffered from insufficient funds. Thus, at a time when many older books of importance were coming on the market at prices that now seem fantastically low, there was no money to acquire them. Of the important books that were currently published, however, a goodly number were purchased. After 1945, when the library was favored with increased funds, the task of filling the gaps among the older books was resumed with vigor. The chief acquisition of this latest period was a special collection of Russian revolutionary publications.

ANALYSIS OF THE COLLECTION

Theoretical Classics

The important theorists are not great in number, but for a variety of reasons there are formidable problems in acquiring some of their books. A good example is the collected writings of Marx, of which there is probably not a complete set of the best edition in the United States, owing to the fact that this was published in Moscow. Another difficulty is that a majority of the theoretical classics were written prior to 1860, some in small editions and some in other circumstances that usually result in a scarcity of copies. For example, Charles Hall's *The Effects of Civilization* is presumably no longer extant in the first edition of 1805, and even an 1850 second edition copy is difficult to obtain, judging by Wisconsin's unsuccessful efforts to do so.

In the chief writings of the major and minor ranking theorists, Wisconsin's collection is nearly complete—a statement that could not be made were it not for the existence in several instances of modern reprints. Unfortunately, the French have shown less interest in reprinting these books than have the English and the Germans.

Books by Labor Leaders

Generally speaking, books written by labor leaders are easier to purchase than are those by the theorists, for the reasons that most were published more recently and in circumstances that insure survival. On the other hand, gaps are inevitable because the number that must be acquired is large. Thus, Wisconsin lacks such important items as the collected writings of Viktor Adler, leader of the Austrian Social Democratic Party, the memoirs of Stephen Born, early organizer of German labor, and two of the more important books by Cesar de Paepe, who helped found the labor party in Belgium.

While Wisconsin's collection is generally strong in the writings of labor leaders,

the English, Germans, and French are best represented. An unusual item is the 1860 book on labor unions written by T. J. Dunning, declared by the Webbs to be the best exposition of trade unionism by a working man. Of the Germans, the library has exceptional strength in the writings of the two Liebknichts, and of Lassalle.

Periodicals and Newspapers

Complete sets of labor and socialist periodicals are infrequently found in American libraries. To illustrate the situation: of the fourteen best-known English periodicals launched prior to 1900, complete sets were lacking in five, according to the Union List of Serials. Only Wisconsin had as many as four in a complete state.

Thus it follows that any library which claims to have a good collection must temper its enthusiasm. It is with this thought in mind that a few periodicals and newspapers are here mentioned with pride. The *Commonweal*, representing the group with which William Morris was associated, is seemingly found complete only at Wisconsin, as is true of *Révolution*, the anarchist publication with which Kropotkin was connected. Another rare periodical is the *Sozialdemokrat*, which was smuggled into Germany during the years when socialist activity was banned in that country. Of considerable interest is the *Junge Generation*, published in Switzerland in the early forties by working men who were disciples of Marx. Among the indispensable items are the *Vorwärts* and the *Arbeiterzeitung*, organs of the Social Democrats in Germany and Austria respectively. An unusual group of Russian revolutionary periodicals is discussed below in the section on the Russian revolutionary movement.

Congresses of Labor Unions and Parties

A prime source for the study of labor unions and parties is the record of the proceedings of their congresses. Wisconsin's files of the proceedings of English

unions is extensive, though spotty. Naturally, the collection includes most of the reports of the Trades Union Congress. Likewise prized are the reports of the meetings of the Labour Party and of the Independent Labour Party. Unfortunately, those of the Social Democratic Federation are lacking.

Much less plentiful are the holdings of the reports of the French unions and parties, of which, owing to the French habit of permitting principles to fractionize their politics, there has been a bewildering array. Only a private collector, it seems, could have kept up adequately with the maze of publishing that resulted.

The German reports show the collecting genius of Herman Schleuter. To his basic files, a number have since been added. Not only does the library own a file of the reports of the Social Democratic Party, but there is on the shelves as well the reports of the earlier parties founded by Lassalle and Bebel. Almost complete is the set of the proceedings of Germany's "master" union, the Generalkommission der Gewerkschaften.

Two other noteworthy items are the proceedings of the Austrian Social Democratic Party and the proceedings of several meetings of the Russian Social Democratic Labor Party.

The Russian Revolutionary Collection

This collection consists of about 1,500 titles, among which there are 70 periodicals. About two-thirds of the material belongs to "underground" literature, that is, literature that was published to be smuggled into Russia. The remainder was printed in Russia in the brief period following the revolution of 1905. The chief importance of these writings is that in them can be found the ideas that in time helped to bring about the downfall of the monarchy. Bolsheviks, Mensheviks, anarchists, constitutional reformers, agricultural reformers—all the competing groups—are represented.

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Does Continuous Revision Require Continuous Replacement?

THE POLICY OF THE continuous revision of encyclopedias makes it necessary for the librarian to decide how often his library should replace a multi-volume encyclopedia. A conscientious librarian is likely to feel that an encyclopedia should be as current as the budget will allow, even if other reference books have to be passed over. The pace at which knowledge is increasing in most fields would seem to make the continuous revision and continuous purchase of encyclopedias obligatory. Unless an encyclopedia is new, how can the latest, or even the recent, developments be made readily available? The logic seems inescapable: (1) an encyclopedia is usually the first source one turns to for an authoritative discussion on an unfamiliar topic; (2) human knowledge is increasing at a dizzy and bewildering pace; (3) encyclopedias summarizing human knowledge are now continuously altered so as to keep up with these developments. Therefore, in order to make the latest facts available, libraries should keep their encyclopedias as up to date as possible.

Despite the argument just outlined, I believe it can be shown that from a practical standpoint the latest revision of an encyclopedia is not essential for good reference service. In the first place, it is obvious that an encyclopedia is not the proper source for current or near-current information, because research and events develop far too fast for such a ponderous instrument to keep pace with them. Almanacs, handbooks, periodicals, and even

encyclopedia yearbooks can be expected to supply up-to-date information not available in an encyclopedia. Sometimes more recent facts can also be found in an official or a primary source, such as a government document or a scientist's report in a learned journal.

Considering that encyclopedia replacement is such a practical subject, it is curious that so little discussion of it can be found. A search of *Library Literature* revealed only one article, which will be quoted later. In the prefaces to *Encyclopedia Americana* and *Collier's Encyclopedia* oblique references appear, but in *Britannica* the issue is faced squarely. The writer of the preface to the *Americana* (1953) makes incidental mention of the preponderance of closed material but does not go into detail.¹ The publisher of *Collier's Encyclopedia* (1954) refers to obsolescence indirectly by repeating three times on one page that *Collier's* is "entirely new." He then adds that as a result of this it has not been necessary to resort "to the standard encyclopedia practice in revision of cutting existing articles to make room for sketchy recordings of recent developments."² Walter Yust, the editor of the *Encyclopedia Britannica*, is more precise. He declares that about 75 per cent of the material in an encyclopedia receives very infrequent revision. It is perhaps worth emphasizing that Yust also makes it clear that by no means all the

¹ "When one considers that the greater part of a general reference encyclopedia necessarily comprises articles on closed subjects, such as biographical sketches of historical personages, records of epochal events of past times, histories of philosophies and religions, descriptions of vanished civilizations and pioneer mechanisms, it will be realized the revisions of *The Americana* have been mainly concentrated on subjects of continuing development." Vol. 1, p. iv.

² Vol. 1, p. v.

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remaining 25 per cent requires or receives revision every year or even every three years.³

Is there reason to assume that the revision policy of other encyclopedias is more rigorous than that of *Britannica*? The outstanding example of the durability of the material in an encyclopedia is perhaps the fact that articles on literature in the 11th edition of the *Britannica* (1911) are still recommended to students. The material that does not soon become out of date is what we value in encyclopedias, and it is for this type of information that the public should be encouraged to consult them. It does, however, seem uneconomical to buy frequent reprints of the nearly permanent material found in encyclopedias just to obtain the transitory information which can be supplied at much less cost and usually in more current form in other reference books.

Why then do reputable makers of encyclopedias bring out annual revisions if they do not expect to sell them annually, or at least as frequently as possible, to their customers? Yust explains that the purpose of continuous revision is primarily to keep a set at a constant value.⁴ Under the previous system of infrequent new editions, the value of an encyclopedia was high when it first appeared, after which it would decline at an accelerating rate. Then, when word got out that a new edition was in preparation, the value of the current edition became almost nil. Continuous revision corrects this situation, but it creates the danger of a librarian's assuming that an encyclopedia must be up to the minute in order to do its work. In an age when many products appear in a new model every year, it is easy to assume that encyclopedias also are not built to last. Although salesmen may encourage this

view, the editor of the *Britannica* as noted above does not do so. He says further, "It is, I believe, a most unfortunate development in the distribution of encyclopedias that the question of constant timeliness should enter so much into the sale and purchase."⁵ Continuous revision, it would appear, does not require continuous replacement.

Turning from the makers to the users, one should ask who consults an encyclopedia? Certainly not the specialist. Rather, as mentioned above, the person who wants an introduction to an unfamiliar topic or perhaps one who wants to refresh his memory about something he has forgotten. Such a person seldom has need of the latest statistic or the most recent development on a rapidly changing subject, and he will probably be disappointed if he looks for this kind of information in even the most recent encyclopedia.

If it is accepted that the latest encyclopedia is not essential for good reference service, there remains the question raised at the beginning of this discussion: how often should an encyclopedia be replaced? No precise answer will be given here, but it has been my experience that, if it is used intelligently for basic and introductory information, a good encyclopedia will provide excellent reference service for five years and beyond that if need be.

To the objection that a five-year-old encyclopedia will not be used intelligently by some readers, with the result that out-of-date and inaccurate information will be disseminated, the response must be that almost every book is susceptible to some kind of misuse and that even the most recent encyclopedia will contain some obsolete information. Providing the latest encyclopedia will not guarantee that it will be used intelligently. Whether it is old or new the librarian must still supply adequate sources for recent information, and he must always guard against improper use of encyclopedias.

³ "Experience down the years indicates that 75 per cent of the material in an encyclopedia needs changing only at long intervals. The other 25 per cent requires continuous revision, some every year, some every two years, some every three years, and so on." *Encyclopaedia Britannica* (1955), Vol. 1, "Editor's Preface."

⁴ Walter Yust, "Revision of Encyclopedias," *CRL*, I (1940), 148.

⁵ *Ibid.*, p. 149.

The training of patrons in the proper use of encyclopedias is a closely related subject, but one not pertinent to the present discussion. It ought, however, to be pointed out that, on the basis of the facts

brought out above, a recent encyclopedia does not materially affect the educative role and responsibility of the librarian to see that the books in his care are used to the best advantage.

The Subject Ph.D. and Librarianship

(Continued from page 126)

lem of vital importance. Some urgent needs in documentation research are: truly flexible classification schemes, suitable for subject headings and mechanical selection codes as well as for classification *per se*;¹⁰ a new approach to subject headings, possibly with points of access in classified index proportions; machines for literature searching based on some principle other than the dichotomy; and studies in language engineering, linguistics and semantics to provide a basis for reduction of the ambiguity in terminology, especially in subject headings and in machine language codes.

The place of the subject Ph.D. has been discussed, mainly from the point of view of the holder of this kind of doctorate. The provision of library training to potential librarians with such a background offers an opportunity for the

schools to develop flexibility in their programs. On the other hand, the core curriculum in librarianship is a necessity for work in any aspect of library science, including subject specialties. The Ph.D. who becomes a subject specialist librarian may still maintain his paramount interest in his subject field, whether in an academic or a special library. Those more interested in professional librarianship will find positions in administration, reference, bibliography and cataloging for which the doctorate has a distinct advantage. The whole new science of documentation practically requires advanced study in subject fields as a prerequisite to accomplishment. The problems which must be solved before the library can reach its greatest fulfillment as a functioning storehouse of information pose a real challenge to every branch of the library profession. In this respect, the subject Ph.D. has an important contribution to make, whether as a conventional librarian, a subject specialist or a documentalst.

¹⁰ The essential unity of problems in these three areas has been pointed out in Brian C. Vickery, "Developments in Subject Indexing," *Journal of Documentation*, XI (1955), 1-11.

Second Annual Midwest Academic Libraries Conference

The second annual Midwest Academic Libraries Conference will be held at Marquette University in Milwaukee, May 10 and 11, Friday and Saturday. Three speakers have already been engaged, Robert Downs, Ralph Esterquest, and the Academic Vice President of Marquette University. Invitations will be sent to all academic libraries in the Middle West after March 1.

New Periodicals of 1956—Part II

FROM THE EXAMINATION of Library of Congress receipts of periodicals launched in 1956 it appears that the number is greater than in some years. Many come from Europe, including areas under Russian occupation, and from Latin America. Subject, purpose and style vary widely as always. Those included in the list which follows were considered as having some significance for libraries.

ABSTRACTS AND REVIEWS. *Bibliotheca Classica Orientalis* published by the Institut für Griechisch-Römanische Altertumskunde of the Deutsche Akademie der Wissenschaften contains reviews of books and abstracts of periodical articles on studies in classical antiquities which have been made in the USSR and the satellite countries. *Monitor* published in Dallas is "an indexed abstract of significant information published each month in the oil and gas industries press." *Neue Politische Literatur, Berichte Über das Internationale Schrifttum* is published in Stuttgart. As the title indicates this journal is made up of reviews of periodical articles and a few book reviews. Weston College of the Holy Spirit, Weston, Massachusetts, has published an experimental first issue of *New Testament Abstracts* of books and periodical articles.

ACCOUNTING. The American Society of Military Comptrollers has begun the publication of *The Armed Forces Comptroller* as its official publication. The journal "is a forum for the presentation of the activities of military comptroller-

ship." "Financial Management in the Defense Department," by the Comptroller of that Department, and "Comptrollership in the Navy" by the Comptroller of the Department of the Navy are articles in volume one, number one.

AUTOGRAPHS. Collectors of autographs, as well as historians will find *Scripta Manent* published by the Swiss Society of Autograph Collectors of interest for its articles on autographs and collections of autographs. Included in the first number are a listing of German letters and manuscripts in Swiss libraries and announcements of public auctions.

CIVIL WAR HISTORY. A tedious undertaking is that of Joseph A. Huebner of Chicago who is preparing *Civil War Index* which is intended to cover the entire literature (books and periodicals) of the Civil War period of American history. The index is arranged by subjects with the references consisting of author's surname, title of the work, date of publication and page citation. The compiler notes that Lincoln and Jefferson Davis will not be treated.

ENGINEERING. *British Chemical Engineering* is a journal devoted to the techniques of chemical engineering as applied to industry. The first number treats such subjects as Britain's first synthetic rubber plant, viscosity control, jet pump design and others. *Die Atom Wirtschaft* is published in Düsseldorf. The chief of the Bundesministerium für Atomfragen has contributed "The State's Role in Atomic Affairs." Other articles include "Development of Nuclear Energy in the United States," and "Use of Atomic Energy in the Soviet Union." The text is in German with digests in English and

Miss Brown is head, Serials Section, Descriptive Cataloging Division, Library of Congress.

French. *Aviation Research & Development* is published in New York. It will report on new products and discoveries and the research under way by business firms, universities and the government. It is intended for aviation engineers and civilian and military technical executives. *Electrical Design News* will present "worldwide coverage of news and ideas for electrical designers and electronics specialists." *Élites et Responsabilités* is a scholarly journal published in Paris by the Centre économique et social de perfectionnement des cadres. Articles in the first issue treat of technology and culture, civilization and technology, scientific research and technology, nuclear physics and its industrial application and many other subjects. *Journal of Fluid Mechanics* from London will publish theoretical and experimental investigations of all aspects of the mechanics of fluids. *Great Lakes-St. Lawrence Seaway* reports on the construction of the seaway and the economic development and possibilities of the area. *Missiles and Rockets, Magazine of World Astronautics* deals with space flight, rockets and satellites and many other phases of this new subject. *Motor Guide* will present the reader with performance records of cars, give him a preview of imported cars, help him buy supplies and otherwise inform and entertain him. *Nuclear Engineering* from London treats of the production of nuclear energy, such as the building of reactors, the disposal of fission products and the training of nuclear engineers. *Nuclear Power* also from London is concerned with the industrial application of nuclear energy.

GEOGRAPHY. *The Indian Geographer* is published by the Association of Indian Geographers. It will report on studies and research in geography in papers, reviews and bibliographies.

LIBRARIES. The International Association of Agricultural Librarians and Documentalists is publishing a *Quarterly Bulletin* to maintain connections and spread

information during the intervals between meetings of the Association. A regular feature will be bibliographical news on new periodicals (also changes of title and cessations) and new reference works. *Mountain-Plains Library Quarterly* is the official publication of the Mountain-Plains Library Association. It will deal with the special problems of this seven state region and the libraries' role in their solution. There will also be included news of professional activities.

LINGUISTICS. *Zeitschrift für Slawistik* published in Berlin "im Auftrage der Deutschen Akademie der Wissenschaften" includes articles on Slavic linguistics and book reviews. Of importance in volume one, number one, is the bibliography "Zehn Jahre Slawistik und Osteuropa-Kunde im Spiegel der Deutschsprachigen Veröffentlichungen Ostdeutschlands, 1945-1955."

LITERATURE. A brief, literary and theatrical journal, *Alcor* is of interest largely because it comes from Asunción, Paraguay. Paraguayan poets, dramatists and the theater are discussed. *Aletheia* whose fields are to be philosophy, art, literature and science is a small journal published in Buenos Aires. *The Berkeley Review* from Berkeley, California is to be "a magazine devoted to discovery." The first issue is dedicated to the French poet, Saint-John Perse. Another journal, interesting because of its origin, La Paz, Bolivia, is *Cordillera* published by the Departamento de Publicaciones y Difusión Cultural of Bolivia. *Ficción* is published in Buenos Aires under the direction of the novelist, Juan Goyanarte. *Graef, Poesía, Teatro, Ficção, Ensaio, Crítica* is published in Lisbon under the direction of António Manuel Couto Viana. *Panoramas* is a general literary and cultural journal published in Mexico and edited by B. Costa-Amic. *Studi Internazionali di Scienze e Lettere* is published by the Instituzione Roerich in Bologna. Enrico Gerardo Carpani is the director with a large number

of collaborators and consultants from all over the world. In the first issue is "Rassegna Critica di Bibliografia." Somewhat similar in scope is *Ciencia y Cultura* from the Universidad Nacional del Zulia in Venezuela.

MEDICINE AND HOSPITALS. *Hospital Administration* is the quarterly journal of the American College of Hospital Administrators. Human relations in administration and hospital trusteeship are treated in the initial issue. A new journal on psychiatry is the *Journal of the Philadelphia Psychiatric Hospital*. It is the purpose of the editors to encourage scientific writing and to have contributions from the visiting and resident staffs as well as from prominent persons elsewhere. "The Caine Mutiny" is the subject of an interesting article by one of the hospital's staff doctors. *Physics in Medicine and Biology* will report research in the physical properties and constitution of living matter and the applications of physics to the elucidation of problems in medicine, biology and physiology. *Polish Medical History and Science Bulletin* published in Chicago by the Polish Medical Alliance aims to present to the English speaking physician the outstanding research works, both past and present, along with résumés of the accomplishments of Polish medicine. Mr. H. G. Schulz of Munich is an editor and the publisher of *Review of Eastern Medical Sciences*. A note from the editors state that their desire is "to assist scientists of the Western world to become acquainted with the status of medical sciences in the USSR and in other Eastern countries. The review is a scientific journal and has no political or propagandistic aims. Its only goal is the objective reporting of activities in Eastern medical sciences."

MUSIC, DANCING, ART. *Church Choral Music* is a journal for choir directors and ministers of music. In addition to helpful articles such as how to develop and train a choir there are included some scores of

anthems. *Danzas Nativas, Revista Argentina de Danzas y Folklore* has for its aim the study, preservation and performance of Argentinian folk dances. Included are articles with directions, diagrams, even lyrics and scores for the dances. *European Art This Month* is a summary of art activities in Europe. The editor and publisher is James Fitzsimmons, an American now living in Zürich who addresses his journal to American museum personnel. Exhibitions, auctions, salons, competitions and prizes are announced and described. A list of "Art Works; a Checklist with Occasional Comments" is included in volume one, number one. *Parnas* is a journal on art and architecture from Amsterdam. *Quadrum*, "revue internationale d'art moderne" is published in Brussels. On the international board of editors is Mr. J. J. Sweeney, director of the Guggenheim Museum in New York. The need for better school design has led to the publication of *School Planning* in which there will be articles on the improvement of the "environment of learning." "Classroom Hazards to Health & Learning," "Better Sound Systems Needed for Learning" and "Color and Learning in the Coordinated School" are articles illustrative of the beginning issue.

POLITICAL AND SOCIAL SCIENCE. A group of French professors and French government officials with Pierre Mendès-France as president of the Comité de direction are publishing *Les Cahiers de la République*. The first issue includes articles on "Socialisme et communisme," "Géographie du poujadisme" and other articles of interest. From Buenos Aires comes *Ciencias Sociales, Revista de Investigación Científica* with two principal articles, one on national income, the other on social legislation. The two contributors are the editors of the journal. *Freiheit und Verantwortung* from Stuttgart has as its aim education for good citizenship in a democracy.

PUBLIC ADMINISTRATION AND LAW. *Re-*

vista de Administración Pública deals with matters of Mexican public administration on the national, state and municipal level. It is the organ of the Instituto de Administración Pública. The University of Costa Rica has started the publication of *Revista de Ciencias Jurídico-Sociales* which deals largely with Costa Rican questions.

RELIGION. From Washington comes *Christianity Today* whose contributors include the Reverend Billy Graham, G. C. Berkouwer, Professor of Theology, Free University of Amsterdam and other qualified persons. In addition to articles there will be included book reviews and brief notes on periodical articles.

SCIENCE. *Annales d'Histochimie* is the official organ of the Société française d'histochimie. It will contain papers on clinical and physical studies and research in cytology and histology. *Ernährungsforschung* will publish reports from the Institut für Ernährungsforschung and from the Anstalt für Vitaminforschung in Potsdam.

SPECIAL AREAS AND PEOPLES. *Africa South* presents the political and social problems of that area. Such matters as independence, socialism, better living and better education are presented from the point of view of the colored race. *Études Slaves et Est-Européennes* is a publication of the Department of Slavic Studies, University of Montreal. The editorial board is composed of members of Canadian university faculties, many of

whom have come from Poland, Russia, the Ukraine and other countries which are the field of investigation of the Slavic Department. Some articles are in English, some in French. *Der Donauraum* is the journal of the Forschungsinstitut für Fragen des Donauraumes located in Salzburg. The institute hopes through the journal to present the historical, geographical, ethnological, cultural, legal and economic problems of this area. *Germany, the International Magazine of the Federal Republic* presents the story of German post-war recovery. *Portugal, an Informative Review* although published by the Secretariado Nacional da Informação states that it is not a medium of propaganda. Such subjects as the industrialization of Portugal, personalities of Portuguese life and Portuguese museums are treated in the first number.

TAXATION. *British Tax Review* is for the practicing accountant and lawyer. There will be included articles on taxation problems written by persons with practical knowledge. Finance acts will be discussed and important cases annotated.

UNIVERSITIES. To publish information in the research, teaching, and other activities of universities, particularly Latin American universities, *Revista Universitaria* has been launched in Buenos Aires. Such subjects as political parties and universities, the organization and administration of Swiss universities, legislation affecting universities and their faculties are treated in the first issue.

Periodicals

Africa South. Ronald M. Segal, Editor, P. O. Box 1039, Cape Town. v.1, no.1, October/December 1956. Frequency not given. Price not given.
Alcor. Apartado Postal 71A, Asunción. v.1, no.3, April 1956. Monthly. Ge 15 per issue. (v.1, no.1 not available for examination)
Aléthia. Sayon 6033, Buenos Aires. v.1, no.1, March/April 1956. Frequency not given. \$4.
Annales d'Histochimie. Société française d'histo-

chimie, 45 Rue des Saint-Pères, Paris 6. v.1, no.1, January/March 1956. Quarterly. 3,000 F.
The Armed Forces Comptroller. American Society of Military Comptroller, 3130 Wisconsin Ave., N.W., Washington 16. v.1, no.1, July 1956. Quarterly. \$2.
Die Atom Wirtschaft. Verlag Handelsblatt G.m.b.H., Düsseldorf. v.1, no.1, January 1956. Frequency not given. Price not given.
Aviation Research & Development. 140 E. 40th

- St., New York 16. v.1, no.1, October 1956. Monthly. \$10.
- The Berkeley Review*. Barlow, Huppert and Tong, P. O. Box 487, Berkeley 1, Calif. v.1, no.1, winter 1956. Quarterly. \$1.75.
- Bibliotheca Classica Orientalis*. Deutsche Akademie der Wissenschaften, Jägerstrasse 22-23, Berlin W 8. v.1, no.1, 1956. Quarterly. DM 6.50 per issue.
- British Chemical Engineering*. Heywood and Company, Ltd., Drury House, Russell Street, London W.C. 2. v.1, no.1, May 1956. Monthly. \$6.
- British Tax Review*. 3 Chancery Lane, London, W.C. 2. June 1956. Quarterly. Price not given.
- Les Cahiers de la République*. 1 bis, Place de Valois, Paris 1. no.1, 1956. Bimonthly. 1500 F.
- Christianity Today*. Today's Publications, Inc., 1014 Washington Building, Washington 5. v.1, no.1, October 15, 1956. Biweekly. \$5.
- Church Choral Service*. Choral Services, Inc., 410 S. Michigan Ave., Chicago 5. October 1956. Monthly (except July-August) \$15.
- Ciencia y Cultura*. Universidad Nacional del Zulia, Maracaibo, Venezuela. v.1, no.1, January/March 1956. Frequency not given. Price not given.
- Ciencias Sociales*. Carrito 484, Buenos Aires. v.1, no.1, February 1956. Bimonthly. \$60.
- Civil War Index*. Joseph A. Huebner, 2952 N. Winer Ave., Chicago. v.1, no.1, March 1956. Quarterly. \$5.
- Cordillera*. Departamento de Publicaciones y Difusión Cultural, La Paz. v.1, no.1, July/August 1956. Frequency not given. Price not given.
- Danzas Nativas*. Virrey del Pino 2750, Buenos Aires. v.1, no.1, July 1956. Monthly. \$68.
- Der Donauraum*. Inbergstrasse 22, Salzburg. v.1, no.1, 1956. Quarterly 96 s.
- Electrical Design News*. Rogers Publishing Company, 3375 S. Bannock, Englewood, Colo. v.1, no.1, May 1956. Monthly. \$10.
- Elites et Responsabilités*. Centre économique et social de perfectionnement des cadres, 30 Rue de Gramont, Paris 2. no.1, February 1956. Monthly. 6.000 F.
- Ernährungsforschung*. Akademie-Verlag, Berlin. v.1, no.2, 1956. Frequency not given. Price not given. (v.1, no.1 not available for examination)
- Etudes Slaves et Est-Européennes*. Department of Slavic Studies, University of Montreal, P. O. Box 6128, Montreal. v.1, no.1, spring 1956. Quarterly. \$4.
- European Art This Month*. James Fitzsimmons, Frochaugasse 5, Zürich 1. v.1, no.1, November 1956. 10 no. a year. \$6.
- Ficción*. Paraguay 479, Buenos Aires. no.1, May/June 1956. Bimonthly. \$4.
- Freiheit und Verantwortung*. Ernst Klett Verlag, Stuttgart. v.1, no. 1, June 1956. Every six weeks. DM 3 per issue.
- Germany*. Übersee-Verlag, G.m.b.H., 28, Neue Rabenstrasse, Hamburg. no.1, May 1956. Quarterly. \$1.
- Graef*. Empresa Nacional de Publicidade, Av. da Liberdade, 266, Lisboa. no.1, April/May 1956. Bimonthly. 50\$00
- Great Lakes-St. Lawrence Seaway*. 4461 West Jefferson, Detroit 9. v.1, no.1, May 1956. Monthly. \$3.
- Hospital Administration*. 620 N. Michigan Ave., Chicago 11. v.1, no.1, fall 1956. Quarterly. \$5.
- The Indian Geographer*. Association of Indian Geographers, Post Box 644, New Delhi. v.1, no.1, August 1956. Semiannual. \$4.
- International Association of Agricultural Librarians and Documentalists*. Quarterly Bulletin, Mr. T. P. Loojcs, Centrum voor Landbouwdocumentatie, General-Foulkes Weg 1 A, Wageningen. v.1, no.1, January 1956. Fr 3 50.
- Journal of Fluid Mechanics*. Taylor and Francis, London. v.1, no.1, May 1956. Frequency not given. \$16.50.
- Missiles and Rockets*. American Aviation Publications, Washington. v.1, no.1, October 1956. Monthly. \$8.
- Monitor*. P. O. Box 476, Dallas 21. v.1, no.1, November 1956. Bimonthly. \$7.50.
- Motor Guide*. Motor Publications, 814 H St., N.W., Washington. v.1, no.1, August 1956. Bimonthly. \$1.50.
- Mountain-Plains Library Quarterly*. Bibliographical Center for Research, Denver Public Library, Denver. v.1, no.1, spring 1956. \$2.
- Neue Politische Literatur*. Ring Verlag, Stuttgart. v.1, no.1, July 1956. Monthly. DM 2 per issue.
- New Testament Abstracts*. Weston College of the Holy Spirit, Weston 93, Mass. May 1956. Frequency not given. Price not given.
- Nuclear Engineering*. Temple Press Limited, Bowling Green Lane, London E.C. 1. v.1, no.1, April 1956. Monthly. \$7.
- Nuclear Power*. 3 Percy St., London W 1. v.1, no.2, June 1956. Frequency not given. \$8. (v.1, no.1 not available for examination)
- Panoramas*. Calle Mesones 14, Mexico. no.1, spring 1956. 4 no. a year. \$3.
- Parnas*. Nieuwe Achtergracht 102-104, Amsterdam. no.1, 1956. Biweekly. £20.
- Philadelphia. Psychiatric Hospital*. Journal. Ford Road and Monument Ave., Philadelphia 31. v.1, no.1, September 1956. Frequency not given. Price not given.
- Physics in Medicine and Biology*. Taylor and Francis, Ltd., Red Lion Court, Fleet Street,

- London, E.C. 4. v.1, no.1, July 1956. Frequency not given. £5 10s.
- Polish Medical History and Science Bulletin*. Polish Medical Alliance, 2424 N. Kedzie Blvd., Chicago 47. v.1, no.1, July 1956. Frequency not given. \$1.50 per issue.
- Portugal*. Secretariado Nacional da Informação, Lisbon. no.1, July/August 1956. Frequency not given. Price not given.
- Quadrant*. Association pour la diffusion artistique et culturelle, Palais des beaux-arts, 10 Rue Royale, Bruxelles. no.1, May 1956. Semiannual. Price not given.
- Review of Eastern Medical Sciences*. H. G. Schulz, Postfach 26, München 62. no.1, January/March 1956. Frequency not given. Free.
- Revista de Administración Pública*. Instituto de Administración Pública, Av. Juárez 4-807, Mexico 1. no.1, January/March 1956. Frequency not given. Price not given.
- Revista de Ciencias Jurídico-Sociales*. Universidad de Costa Rica, Apartado 3862, San José. v.1, No.1, March 1956. Frequency not given. Price not given.
- Revista Universitaria*. San Martín 244, Buenos Aires. v.1, no.1, May 1956. Frequency not given. \$30 for 6 no.
- School Planning*. 75 E. Wacker Drive, Chicago 1. v.1, no.1, June/July 1956. Bimonthly. \$5.
- Scripta Manent*. Holbeinstrasse 57, Basel. v.1, no.1, September 1956. Semiannual. Fr S 20.
- Studi Internazionali di Scienze e Lettere*. Instituzione Roerich, Via Rizzoli 4, Bologna. v.1, no.1, March 1956. Quarterly. Price not given.
- Zeitschrift für Slavistik*. Akademie Verlag, Berlin. v.1, no.1, 1956. Quarterly. DM 12 per issue.

Sources for the Study of European Labor and Socialism (1840-1914) at Wisconsin

(Continued from page 143)

The periodicals are easily the prize of the Russian collection, if for no other reason than that to acquire them now on a piece-by-piece basis would be a hopeless task. Each one is a rare item. The most famous of them all, but not the rarest, is *Iskra*, of which Wisconsin has all 112 issues. Lenin was among those who founded this organ of the Social Democratic Party. Later, when Lenin went into the opposition, he founded the *Vpered*. The *Osvobodzhdenie*, of which 79 issues appeared, represented the non-revolutionary constitutional reformers. Finally, and the temptation to list more is strong, there is the *Svobodnoe Slovo*, issued by the followers of Tolstoi.

The "International"

As an agency within which the socialists revealed their differences in outlook, and as a platform for propagandistic ac-

tivity by Marx, the International Workmen's Association (founded 1864) is worthy of study. Of the proceedings of this Association, Wisconsin has an almost complete file; unfortunately, there is lacking the parallel material for the anarchists, bitter enemies of Marx.

The outstanding item on the International is the manuscript book of the minutes of the meeting of 1872, the year in which the anarchists were expelled from the Association. This minute book, never before published, will soon appear in printed form.

In the proceedings of the Second International (founded 1889) can be traced the warfare between the various socialist groups and the attempts of the participants to settle the differences between the Russian representatives. Wisconsin has a complete file of these proceedings.

ACRL Foundation Grants Program

THE LILLY GRANTS

The American Library Association has received from the Lilly Endowment, Inc., a grant of \$26,000 to promote the more extensive and imaginative use of library resources by undergraduate students. This money is to be allocated to public and private institutions offering four-year programs and located in Indiana, Illinois, Kentucky, Michigan and Ohio. The Lilly grant is being administered by the Committee on Foundation Grants of the Association of College and Reference Libraries. The Committee will mail application forms to all the four-year institutions in the five-state area late in the winter. Institutions which have not received forms by April first, through clerical error or failure of the mails, should request copies from the ACRL office at ALA Headquarters.

The Committee expects to make about eight grants averaging slightly over \$3,000 each. One half of the money will go to Indiana institutions, according to arrangements with the Lilly Foundation, whose principal support goes to worthy causes within the borders of that state.

These grants should make important contributions to the educational functions of the institutions involved and at the same time set precedents and establish practices which may be adopted by other colleges. Quite possibly a few institutions will receive grants because they have presented very convincing plans for "promoting the more extensive and imaginative use of library resources" by using programs that have been tried and tested elsewhere. Other institutions may receive grants because of plans which are experimental and novel and therefore merit trial. The Committee will use its best judgment in taking a few considered risks with imaginative and untried programs, and yet must be certain that not all the funds are expended in noble experiments which, for one reason or another, may not live up to expectations.

"The more extensive and wider use of library resources" may be stimulated in many different ways. Librarians and teaching faculty can do a great deal if relieved of some

routine responsibilities so that they have time to devote to special programs. Other grants may be made to strengthen the library staff for one year. Still other grants, or parts of grants, may be made for physical needs. The grants will be made to institutions; the Committee assumes that some will be administered by librarians but that others will be assigned for faculty or other uses which are not under library administration. Grants are for active, working programs which give promise of direct benefit to undergraduate education at a particular institution.

Successful applicants will receive grants in June or July of 1957 for use in the next academic year. The Committee has no indication that the grants will be continued. If the Lilly funds are allocated to unusually intelligent and conscientious stewards, the Committee assumes that additional funds will be found somewhere to continue and extend the program another year.—Arthur T. Hamlin, Chairman, ACRL Foundation Grants Committee.

LIBRARIES BENEFITING FROM THE 1956 PROGRAM

Following is a list of the libraries receiving sub-grants from the United States Steel Foundation, New York Times, and Remington Rand grants of 1956.

UNITED STATES STEEL FOUNDATION

Alfred University, Alfred, N. Y.	\$300
Arkansas College, Batesville, Ark.	500
Assumption College, Worcester, Mass. . .	200
Augsburg College and Theological Seminary, Minneapolis, Minn.	300
Augustana College, Sioux Falls, S. D. . .	200
Bates College, Lewiston, Maine	500
Berea College, Berea, Ky.	200
Berry College, Mount Berry, Ga.	500
Bethel College, North Newton, Kan. . .	400
Blackburn College, Carlinville, Ill. . . .	200
Blue Mountain College, Blue Mountain, Miss.	300
Bluffton College, Bluffton, Ohio	200
Brenau College, Gainesville, Ga.	300
Bucknell University, Lewisburg, Pa. . . .	400

California Baptist Theological Seminary, Covina, Calif.	200	Pace College, New York, N. Y.	300
California College of Arts and Crafts, Oakland, Calif.	375	Pacific Lutheran College, Parkland, Wash.	300
Converse College, Spartanburg, S. C. . .	200	Parsons College, Fairfield, Iowa	250
Cooper Union, New York, N. Y.	300	Polytechnic Institute of Brooklyn, Brooklyn, N. Y.	300
Denison University, Granville, Ohio . .	300	Rensselaer Polytechnic Institute, Troy, N. Y.	200
Dillard University, New Orleans, La. . .	200	Rider College, Trenton, N. J.	300
Doane College, Crete, Neb.	350	Roberts Wesleyan College, North Chili, N. Y.	300
Drury College, Springfield, Mo.	200	Rose Polytechnic Institute, Terre Haute, Ind.	300
University of Dubuque, Dubuque, Iowa	300	Saint Ambrose College, Davenport, Iowa	300
Emory and Henry College, Emory, Va. .	300	Saint John's University, Brooklyn, N. Y.	300
Gannon College, Erie, Pa.	300	Saint Joseph's College, Collegeville, Ind.	200
Goucher College, Baltimore, Md.	300	College of Saint Thomas, St. Paul, Minn.	200
Guilford College, Guilford College, N. C.	400	Saint Vincent College, Latrobe, Pa.	200
Hamilton College, Clinton, N. Y.	300	Skidmore College, Saratoga Springs, N. Y.	300
Hanover College, Hanover, Ind.	400	Springfield College, Springfield, Mass. .	200
Hardin-Simmons University, Abilene, Tex.	300	Susquehanna University, Selinsgrove, Pa.	500
Hastings College, Hastings, Neb.	200	Trinity University, San Antonio, Tex. .	300
High Point College, High Point, N. C. .	200	Union College, Barbourville, Ky.	200
Hollins College, Hollins, Va.	600	Wabash College, Crawfordsville, Ind. .	300
Hood College, Frederick, Md.	400	Wagner Lutheran College, Staten Island, N. Y.	500
Hope College, Holland, Mich.	500	Wartburg College, Waverly, Iowa	300
Houghton College, Houghton, N. Y. . .	400	Wayland Baptist College, Plainview, Tex.	300
Illinois Wesleyan University, Bloomington, Ill.	300	Western College for Women, Oxford, Ohio	200
Iona College, New Rochelle, N. Y. . .	400	Wheelock College, Boston, Mass.	200
King College, Bristol, Tenn.	300	Wittenberg College, Springfield, Ohio .	400
Knox College, Galesburg, Ill.	500	Youngstown University, Youngstown, Ohio	300
LaVerne College, LaVerne, Calif.	300		
Lebanon Valley College, Annville, Pa. .	300		
Loyola University, New Orleans, La. . .	300		
Lycoming College, Williamsport, Pa. . .	100		
Manhattanville College of the Sacred Heart, Purchase, N. Y.	300		
Marylhurst College, Marylhurst, Ore. . .	200		
McPherson College, McPherson, Kan. . .	300		
Middlebury College, Middlebury, Vt. . .	300		
Mills College, Oakland, Calif.	300		
Monmouth College, Monmouth, Ill. . .	300		
Morningside College, Sioux City, Iowa	375		
Morris Harvey College, Charleston, W. Va.	300		
Mt. Saint Mary's College, Los Angeles, Calif.	200		
Mt. Saint Mary's College, Emmitsburg, Maryland	300		
Niagara University, Niagara Falls, N. Y.	400		
Northwest Nazarene College, Nampa, Idaho	250		
Norwich University, Northfield, Vt. . .	200		
Olivet College, Olivet, Mich.	300		

NEW YORK TIMES

University of Alaska, College, Alaska . .	600
Baldwin-Wallace College, Berea, Ohio . .	600
University of Detroit, Detroit, Mich. . .	400
Earlham College, Richmond, Ind.	400
University of Kansas City, Kansas City, Mo.	600
Randolph-Macon Woman's College, Lynchburg, Va.	550
University of Richmond, Richmond, Va. .	400
Tougaloo Southern Christian College, Tougaloo, Miss.	400
Wilberforce University, Wilberforce, Ohio	400
College of Wooster, Wooster, Ohio . . .	400

(Continued on page 139)

News from the Field

ACQUISITIONS, GIFTS, COLLECTIONS

The private papers of the late John Erskine have been given to Columbia University by his widow, Mrs. Helen Worden Erskine. Associated with Columbia most of his lifetime as student and professor of English, John Erskine is generally credited with being the originator, through his great books colloquium, of the system of general education used today by Columbia College. Capable of many talents, he was poet, scholar, teacher, administrator, musician, composer, novelist, lecturer and librettist. His pseudo-historical novels, including such best-sellers as *The Private Life of Helen of Troy* (1926) created a new vogue in popular American literature.

J. Walter Lambeth, former United States Congressman from North Carolina, recently presented his official correspondence, papers and documents to the Duke University Library. The collection includes about one thousand books and the texts of many addresses delivered by Lambeth both in and out of Congress. An ardent admirer of President Wilson, Mr. Lambeth's interests lie in the fields of international politics and world problems. Accompanying the materials is a substantial fund for the establishment of the "J. Walter Lambeth Collection" of materials in these fields. Special emphasis will be placed on collecting the writings of statesmen and historians of Asian, African and European nations.

Eighty-one letters by Charles Dickens have been given to the Free Library of Philadelphia by Mrs. D. Jacques Benoliel. These bring to 483 the number of Dickens letters received from the collection of her husband. This year's gift includes letters (more than half unpublished) by 32 correspondents. Especially interesting among the unpublished letters are one to George Cattermole relating to his illustrations for *The Old Curiosity Shop*, one to Disraeli endorsing an application for a civil service post for Clarkson Stanfield's son (with Stanfield's widow's letter to Dickens and a letter from her son to Disraeli), and a letter to Charles Reade, author of *The*

Cloister and the Hearth, asserting the need for authors to prevent unauthorized dramatizations of their works.

Two-hundred seventy-two additional editions of Horace complete the gift of the Moncure Biddle Collection of Horace at the Free Library of Philadelphia. Mr. Biddle began the transfer in December, 1954, giving portions on three occasions before his death. The final group includes notable volumes representing the whole range of Mr. Biddle's interests: four incunabula, among them the first illustrated edition of Horace (Gürninger, 1498); a magnificent seventeenth-century binding executed for the great French collector de Thou; a series of eighteenth-century paraphrases and imitations of Horace by Pope; four copies of the edition illustrated by John Pine (London, 1733-1737) including an uncut copy in the original boards. The whole collection comprises 850 volumes, dating from the fifteenth to the twentieth centuries.

Cubberley Education Library at Stanford University has received a valuable collection of historical books, journals, and pamphlets that belonged to the late Earl Barnes, professor of history and education, who served from the opening of the university in 1891 to 1897. The collection gives an account of education in California at the turn of the century. The donor was his son, Joseph Barnes, author and editor.

Washington University Library at St. Louis, under the guidance of Professor William Ringler of WU's English Department, has been collecting microfilms and photostats of English poetry manuscripts of the Tudor period. Gathered over the last two years, this collection contains films of many items not on the MLA or ACLS British Manuscripts Project lists.

Mrs. E. P. Ellwood of DeKalb, Ill., has given the archives and western history department of the University of Wyoming the records of the famous Isaac L. Ellwood Barbed Wire Company. They consist of 125

letter file boxes, 75 letter press books, 60 ledgers and a large amount of unclassified correspondence. The Ellwood Company, manufacturing barbed wire invented by Joseph Glidden, was one of the first to sell barbed wire on an extensive basis in the American West. Coupled with the Wyoming Stock Growers' Association files, the Ellwood Collection gives the University of Wyoming rich resources in the history of the western range cattle industry.

BUILDINGS

The new Eda Kuhn Loeb Music Library at Harvard University is a two-story wing of the music building. Its construction was made possible largely through a gift of \$225,000 from the Eda Kuhn Loeb estate. Other friends of the music department gave sufficient funds to make up the total building cost of more than \$500,000.

LIBRARY SCHOOLS

The 22nd annual conference of the University of Chicago Graduate Library School will be held from June 19-21, 1957. The subject will be "New Directions in Public Library Developments." Outstanding authorities in the field of public administration, public finance, urban development and related fields will join distinguished speakers in the field of librarianship to discuss emerging problems in public librarianship.

The School of Library Science of Western Reserve University, in conjunction with its Center for Documentation and Communication Research, will present on April 15-17, 1957, the nation's first comprehensive demonstration of systems presently in use for the organization, storage, and retrieval of recorded information, together with a symposium on information-handling problems and techniques. Further information may be obtained from: Dr. Jesse H. Shera, dean, School of Library Science, Western Reserve University, Cleveland 6.

PUBLICATIONS

Princeton University Library has issued a collectors' edition of a hitherto unrecorded book, *The Arte of Angling*, first printed in London in 1577. This 40-leaf volume apparently suggested the general structure as

well as textural material for one of the most famous English books, Izaak Walton's *The Compleat Angler*. Comparing the anonymously written *Arte of Angling* with Walton's illustrious *Angler*, the first edition of which appeared in 1653, Princeton scholars point to "startling coincidences."

The present edition of *The Arte of Angling* is based on the only known copy of the work, given to Princeton by Carl Otto v. Kienbusch, of New York City, distinguished collector of angling literature and a member of the Princeton Class of 1906. Mr. Kienbusch made possible the publication of the volume under the sponsorship of the Friends of the Princeton Library.

EXHIBITIONS

During January, the University of Oklahoma Library held an exhibition of "Herbs and Herbals," involving a joint display of botanical specimens from the Bebb Herbarium and botanical books from the DeGolyer Collection.

Some 3,500 books, published from 1948 to 1956, were included in an exhibition held February 15-28 at the New York Public Library. The theme of the exhibition is "the German Book, 1948-1956," and it was organized by the Association of German Publishers. Of the 1,935 German publishing houses, 431 contributed to the exhibition. The collection will be shown in the Chicago Public Library, March 15-30, and in the Boston Public Library, April 15-30.

F. W. Faxon Company announces that it has sold the back-number part of its business to J. S. Canner Company, 46 Millmont Street, Boston 19. Faxon will continue to issue the *Bulletin of Bibliography*, the Useful Reference Series, and its other publications.

MISCELLANEOUS

The newly-formed Association of British Theological and Philosophical Libraries seeks "to promote the interests of libraries, scholars, and librarians" in the fields of theology and philosophy. It hopes to help member libraries by interchange of information, especially relating to recognized library techniques and sources of knowledge.

(Continued on page 159)

Personnel

C. DONALD COOK has been appointed assistant to the director of Libraries at Columbia University, effective February 1, 1957. The position, which replaces the former Personnel Officer position, will involve two areas of activity: (1) responsibility for the Personnel Officer function, including all aspects of recruiting and developing the staff; and (2) research and management studies, including a sequence of studies such as conducting a review of the libraries' personnel classification, examining the manning table requirements of the various units of the library system, and analyzing various library operations as assigned.

Mr. Cook, a graduate of the University of Arizona, and holder of a bachelor's and mas-



C. DONALD COOK

ter's degree in library service at Columbia University, has completed his course work for the doctoral degree in library science at Columbia. He served on the cataloging staffs of Arizona and Columbia before taking a post as documents librarian at the United Nations Library in Geneva, Switzerland, from 1947 until 1952. Since 1952 he has been associated with the School of Library Service at Columbia as a member of the faculty, and with the Columbia libraries as research assistant in the Cataloging Department. Recently, he has participated in the study of the libraries being conducted by the Subcommittee on the University Libraries of the President's Committee on the Educational Future of the University.

He was a contributor to *Technical Services in Libraries*, issued by the Columbia University Press in 1954, and has written articles for *College and Research Libraries*, of which he has been an assistant to the editor, and *Library Trends*. He has been active in national and regional library associations.—M.F.T.

Appointments

FRANCES BREWER is chief of the rare book division, Detroit Public Library.

CATHERINE BROSKY is librarian of the Graduate School of Public Health, University of Pittsburgh.

CHARLES E. BUTLER, formerly librarian of West Virginia University, is now librarian of Canisius College, Buffalo.

HARRY DEWEY, formerly assistant professor in the University of Wisconsin Library School, is librarian of Drexel Institute of Technology, Philadelphia.

AMBROSE EASTERLY, formerly librarian of Middle Tennessee State College in Murfreesboro, is associate librarian of the University of Missouri.

LORNA FRASER is head of the catalog department, University of Toronto Library.

MARIAN E. GRAY is reference librarian of Bowling Green (Ohio) State University.

ROBERT D. HARVEY is chief of reference

and special services, Northwestern University Library.

ANDREW HORN, librarian of the University of North Carolina at Chapel Hill, will become librarian of Occidental College, Los Angeles, on September 1, 1957.

MIRIAM LICHTHEIM is Far East bibliographer, University of California at Los Angeles Library.

ELOISE McGUIRE is circulation and reference librarian, College of Business Administration, Boston University.

PAULINE MESSENGER became librarian of the El Dorado (Kansas) Junior College when the college moved into a building of its own in September, 1956.

TORBERT H. MILBY is assistant librarian, Evansville (Ind.) College.

BEVERLY T. MOSS is librarian of Millikin University, Decatur, Ill.

GERALD NEWTON is acquisitions librarian, University of Kansas City Libraries.

JAMES E. O'NEILL is map librarian and assistant reference librarian at the University of Detroit Library.

ALDREA J. ROWLAND is catalog librarian, Bradley University.

EDWARD L. SHEPPARD is the new librarian at Garrett Biblical Institute, Evanston, Ill. He had been librarian at Case Memorial Library, Hartford Seminary Foundation since 1954.

STANLEY A. SHEPARD is order librarian, Colgate University.

MRS. ANASTASIA SMITH is assistant in the reference and bibliography section and the government publications room, University of California at Los Angeles.

Appointments in the Stanford University Libraries include: GERARD A. BARKER, catalog department; MRS. VIRGINIA D. BONNICI, physics librarian; MRS. EDITH H. FALCONER, acting chief, acquisitions division; CHARLES R.

GORHAM, senior gift librarian in charge of the gift department; DAVID W. HERON, acting associate director for 1956-57; CATHERINE E. MORTON, special collections librarian; MRS. ELLEN R. RIEDEL, engineering librarian; TAMIE TSUCHIYAMA, catalog librarian.

BETTINA SUMMERS-PAGÉS, chief of acquisitions, National Library, Lima, Peru, is visiting librarian in the Vassar College Library. Arrangements for this eleven-month assignment were made through the cooperation of the International Relations Board of ALA, the International Relations Committee of SLA, and the Department of State's International Educational Exchange Service.

JOSEPH G. TAYLOR, formerly head of the reference department and supervisor of branch libraries at Alabama Polytechnic Institute, has succeeded Frank J. Anderson as librarian of Kansas Wesleyan University, Salina.

Necrology

RUTH M. JONES of the University of Utah Library died on December 14, 1956, as the result of an automobile accident. She had been a member of the staff since her graduation from the university in 1931. During Dr. Jones' career, she was circulation librarian, reference librarian, cataloger and associate professor of library science at the University of Utah. During the war years, she was librarian in charge of the Hill Air Force Base Library.

CARL B. RODEN, who died last fall at the age of 86, successfully devoted a long career to making the Chicago Public Library a force in the community. Beginning 64 years ago as a page in the library, Mr. Roden advanced through various ranks and in 1918 became chief librarian, a position he held until his retirement in 1950. When Mr. Roden started in the library, it had 220,736 volumes and no branches. When he left, it had 2,207,000 volumes and 61 branches, and was the world's largest library in terms of annual circulation of books.

LINDA TUM SUDEN, a staff member of the Lane Medical Library of the Stanford University Libraries from 1921 to 1946, died in

San Francisco last fall. Miss tum Suden was assistant librarian of the medical library at the time of her retirement.

MRS. MARIA VOLKOV, senior reference librarian and art librarian of the Stanford University Libraries, died last fall after a long illness. Born in Riga, Latvia and a graduate of its university, Mrs. Volkov came to the United States in 1940. She earned her professional degree at Columbia University School of Library Service in 1943. She served as librarian of the Lederle Laboratory and assistant museum librarian at the Cooper Union in New York City before coming to Stanford in 1949. Mrs. Volkov won high praise for her organization and development of the library's art collection.

MRS. WINIFRED VAUGHAN WALKER died January 3, 1957 at her home in Van Nuys, Calif. Since September, 1951 she had been librarian of the University Elementary School of the University of California, Los Angeles. Previously she was children's librarian at Pasadena Public Library. She was a graduate of the University of California, Berkeley, and the library school of the University of Michigan.

To perpetuate the memory of Mrs. Walker, the Board of the Family-School Alliance of the University Elementary School has established the Winifred Walker Memorial Fund for scholarships in the field of children's

librarianship. Contributions may be sent to the chairman, Mrs. Blanch DeChene, in care of the Family-School Alliance, University Elementary School, University of California, Los Angeles 24.

ACRL Foundation Grants Program

(Continued from page 154)

REMINGTON RAND

Bard College, Annandale-Hudson, N. Y.	200
Centre College of Kentucky, Danville, Ky.	200
Clarkson College of Technology, Potsdam, N. Y.	400
George Pepperdine College, Los Angeles, Calif.	400
Grand Canyon College, Phoenix, Ariz.	300

Hiram College, Hiram, Ohio	300
Immaculata College, Immaculata, Pa.	250
King's College, Wilkes-Barre, Pa.	500
Marymount College, New York, N. Y.	200
Meredith College, Raleigh, N. C.	400
Nasson College, Springvale, Me.	400
Park College, Parkville, Mo.	300
Roosevelt University, Chicago, Ill.	400
Salem College, Salem, W. Va.	500

News from the Field

(Continued from page 156)

The University of Kansas Library has announced the Taylor Student Book Collection Contest for spring 1957. Through the generosity of Mr. and Mrs. James W. Taylor of Kansas City, Mo., prizes totaling \$100 will be awarded for the best collections entered by any KU student. Mrs. Taylor (herself an enthusiastic collector of H. L. Mencken) and Mr. Taylor hope to promote recognition of the importance of the amateur collector and to encourage the early development of book collecting interests among KU students.

Saint Louis University has become the eighteenth member of the Midwest Inter-Library Corporation. Thus the important research collections of Saint Louis University, including the notable Vatican manuscripts microfilms, are added to the resources of the present MILC members to form an impressive group of library materials for research in the Middle West. James V. Jones, director of libraries of Saint Louis University, will represent his institution of the MILC Advisory Committee of Librarians.

The Catalog—A Finding List?

(Continued from page 111)

sible variations which authorship is capable of producing. This revision would also provide the basis for eventual international agreement on rules of entry, including and even extending beyond the Anglo-American fraternity. This is an eminently worth-while goal. It can be achieved through the cooperate enterprise of librarianship without creating artificial distinctions and hurdles for the

reference librarian who is always dependent upon the work of the cataloger and the code upon which the cataloger bases his decisions. The achievement of the stated purposes will of and by itself produce improvements and economies, and administrative judgment can further secure these gains in the individual library situation.

Books Received

- American Business Dictionary.* By Harold Lazarus. New York: Philosophical Library, 522p. \$10. (Midcentury Reference Library, Dagobert D. Runes, General Editor.)
- Anni Mirabiles, 1921-1925: Reason in the Madness of Letters.* By R. P. Blackmur. Washington: Reference Department, Library of Congress, 1956. 55p. 25c. (Four lectures presented under the auspices of the Gertrude Clarke Whittall Poetry and Literature Fund.)
- The Appraisal of Modern Public Records.* By T. R. Schellenberg. Washington: Superintendent of Documents, 1956. 46p. 20c. (Bulletins of the National Archives, No. 8.)
- Aslib Yearbook, 1956-1957.* London: Aslib, 1956. 172p. 12s. 6d.; 10s. to members of Aslib.
- Civil Service or Bureaucracy?* By E. N. Gladden. New York: John de Graff, 1956. 224p. (A study of the British Civil Service.)
- Fiction Fights the Civil War.* By Robert A. Lively. Chapel Hill: The University of North Carolina Press, 1957. 230p. \$5.00.
- Film Reference Guide for Medicine and the Allied Sciences.* By the Interdepartmental Committee on Medical Training Aids (ICMTA). Washington: Library of Congress, 1956. 51p. 45c. (For sale by the Card Division.)
- Fund og forskning i Det kongelige biblioteks samlinger, III.* 1956. København: Det kongelige bibliotek, 1956. 174p.
- Guide to Reference Books 7th ed.; Second Supplement, 1953-1955.* By Constance M. Winchell. Chicago: American Library Association, 1956. 134p. Paper.
- The Home Library of the Garnetts of "Elmwood."* By Harry Clemons. Charlottesville: University of Virginia Press, 1957. 59p. Cloth: \$2.00; Paper: \$1.00.
- Index to Full Length Plays, 1895 to 1925.* By Ruth Gibbons Thomson. Boston: F. W. Faxon, 1956. 172p. \$5.00. (Useful Reference Series No. 85.)
- Kentucky Tradition.* By Lawrence S. Thompson. Hamden, Conn.: The Shoestring Press, 1956. 225p. \$4.25.
- The Leibniz-Clarke Correspondence.* Edited with introduction and notes by H. G. Alexander. New York: Philosophical Library, Inc., 1956. 200p. \$4.75.
- The Library of Congress; a Selected List of References.* Washington: Library of Congress. Reference Dept. General Reference and Bibliography Division, 1956. 20p. 35c. (For sale by the Card Division.)
- Master's Theses in Education, 1955-1956, No. 5.* Edited by T. A. Lamke and H. M. Silvey. Cedar Falls, Iowa: Research Publications, 1956. 179p.
- A New Look at Reading; a Guide to the Language Arts.* By Willard Abraham. Boston: Porter Sargent, 1956. 236p. Cloth: \$3.50; Paper: \$2.75.
- Poetic, Scientific and Other Forms of Discourse: a New Approach to Greek and Latin Literature.* By Joshua Whatmough. Berkeley: University of California Press, 1956. 285p. \$5. (Sather Classical Lectures, v. 29.)
- Records and Research in Engineering and Industrial Science.* By J. Edwin Holmstrom. 3d ed., rewritten and enl. London: Chapman & Hall, 1956. 491p. 60s.
- The Research Services of the Harvard College Library.* By David C. Weber. Cambridge: Harvard University Library, 1956. 40p. (Guide to the Harvard Libraries, No. 3.)
- Studies in Bibliography; Papers of the Bibliographical Society of the University of Virginia.* Edited by Fredson Bowers. Vol. 9, 1957. Charlottesville, Va.: The Society, 1957. 273p. \$6.00.
- Study Abroad; International Handbook: Fellowships, Scholarships, Educational Exchange.* VIII: 1956-1957. Paris, UNESCO, 1956. 719p. Paper: \$2.00.
- Union List of Little Magazines.* Comp. by Indiana University Library. Chicago, Midwest Inter-Library Center, 1956. 98 l. Paper: \$2.00. (Holdings at Indiana, Northwestern, Ohio State, Iowa, Chicago and Illinois.)
- Union List of Theses of the University of New Zealand, 1910-1954.* Comp. by D. L. Jenkins. Wellington: New Zealand Library Association, 1956. Unpaged. Paper: 1l; Unbound: 17s. 6d.
- The United Nations and Dependent Peoples.* By Emil J. Sady. Washington: Brookings Institution, 1956. 205p. Paper: \$1.50.
- The University of South Africa and Its Department of Library Science.* By H. J. de Vries-chauer. Pretoria, 1956. 81 l. (Mousaion Nr 12.)
- When Did It Happen? A Noted Researcher's Almanac of Yesterdays.* By Stanford M. Mirkin. New York: Ives Washburn, 1957. 434p. \$5.75.

Nominees for ACRL Offices

1957-58

PRESIDENT

Thornton, Eileen, Librarian, Oberlin College, Oberlin, Ohio.

VICE-PRESIDENT AND PRESIDENT-ELECT (one to be elected)

- { Logsdon, Richard H., Director of Libraries, Columbia University, New York.
- { Branscomb, Lewis C., Director of Libraries, Ohio State University, Columbus.

DIRECTOR-AT-LARGE (one to be elected)

- { Findly, Elizabeth, Head Reference and Documents Librarian, University of Oregon, Eugene.
- { Rogers, Rutherford D., Chief, Reference Department, New York Public Library, New York.

REPRESENTATIVES ON ALA COUNCIL (eight to be elected)

- { Pierce, Helen F., Librarian, Modesto Junior College, Modesto, California.
- { Stone, Elizabeth O., Assistant Director of Libraries, Southern Illinois University, Carbondale.
- { Brubaker, H. A., Librarian, Lawrence College, Appleton, Wisconsin.
- { Wright, Walter W., Assistant Librarian, Service Division, University of Pennsylvania, Philadelphia.
- { Hintz, Carl, Librarian, University of Oregon, Eugene.
- { Ottemiller, John H., Associate Librarian, Yale University, New Haven, Connecticut.
- { Erickson, Walfred, Librarian, Eastern Michigan College, Ypsilanti.
- { Harvey, John F., Librarian, Kansas State Teachers College, Pittsburg.
- { Fayer, Mrs. Margaret L., Librarian, Middlebury College, Middlebury, Vermont.
- { Winchell, Constance M., Reference Librarian, Columbia University, New York.
- { Bennett, Fleming, Librarian, University of Arizona, Tucson.
- { Stallings, H. Dean, Librarian, North Dakota Agricultural College, Fargo.
- { Towne, Jackson E., Librarian, Michigan State University, East Lansing.
- { West, Stanley L., Director of Libraries, University of Florida, Gainesville.
- { Crosland, Mrs. J. Henley, Director of Libraries, Georgia Institute of Technology, Atlanta.
- { Hertel, Robert R., Librarian, State Teachers College, Cortland, New York.

Review Articles

Information for Administrators

Information for Administrators; a Guide to Publications and Services for Management in Business and Government. By Paul Wasserman. Ithaca, Cornell University Press, 1956. \$75p. \$6.

A guide to information for administrators might deal only with the function and art of management. Far broader in scope, this manual provides a comprehensive guide to information sources in the fields of business and economic activity, knowledge of which is an essential tool for the implementation of decision-making in business. It is not solely bibliographic; rather it emphasizes organizations and other sources of information which may or may not include publications.

An outline of the services of libraries and the government as dispensers of business information is followed by the major portion of the book, which is developed by types of information sources, with separate chapters on business services, periodicals, newspapers, sources of statistical data, associations and organizations, and general reference books. Next, sources of information on local areas and guides to international information are discussed. In the last two chapters, basic publications in business administration and in public administration are pulled together from all types and sources, in the only two wholly bibliographical sections in the book.

The result is an extraordinarily comprehensive survey, yet one which is specific enough to be a useful tool, always accurate but minus the web of intricate detail which usually accompanies descriptive annotations of statistical data. Mr. Wasserman has been highly successful in producing a book which falls squarely between the usual rudimentary or elementary guide, chiefly distinguished by its sins of omission, and the involved technical discussion of statistical series, distinguished by its abstruseness for the layman. For instance, the chapter on the sources of legislative and regulatory data is the clearest, most concise exposition for the layman—and

incidentally the non-legal librarian—that this business librarian has seen. The legislative process is described succinctly from the drafting of the bill through its consideration in committee, placement on the calendar, procedure in the House and Senate, referral hearings in conference, presidential action, and enactment into law. Short, careful descriptions of the government documents which are the by-product of the legislative process are included. The description of legislative documents is carried to the State and municipal level.

The treatment of other aspects of United States federal government documents seems less compact. In Chapter II there is a very short general survey of the government as a source of information; in Chapter VII, devoted to the sources of statistical data, guides to governmental sources are given only cursory attention, followed by a fairly detailed but rather loose account of the Federal statistical system and an inadequate list of "compilations" (meaning basic statistical sources); in Chapter 10, covering business and government research organizations, there is a short section on the role of government in research. Anyone who works with business information sources understands well the difficulty of dealing with the complexity of government documents in a survey of this kind. Either they receive wholly inadequate treatment, too vague to be useful, or they simply move in and take over the book. Fortunately there are available excellent guides devoted wholly to government documents as business sources, all of which Mr. Wasserman faithfully lists.

The sections on periodicals and newspapers are particularly well done. The selection of titles is discriminating, the annotations careful and detailed, and the discussion of indexes, directories, guides, abstracting services, union lists and so on most helpful. Included are rather detailed descriptions of the financial sections of the *New York Times* and the *New York Herald Tribune*, and an exposition of financial terms.

The sources for statistical data are the segments of business information which always

give conscientious compilers the jitters. Whether to develop primarily by type of source, type of publication, by area, or by subject is a difficult decision and hard to stick by, once made. Mr. Wasserman has succeeded in avoiding the seemingly inevitable inconsistencies and compromises no better and no less than the rest of us. It is most important to the layman, perhaps, that the compiler, in any discussion of statistical sources, should map a clear trail from the currently issued statistics in any series to the annual compilation and on to the historical base book (or vice versa, of course). This guide is only partly successful in performing this function.

The facilities of trade associations and chambers of commerce receive more than adequate attention, the contributions of research and professional associations perhaps not enough, if consideration is taken of the comparative quality of their publications. On the other hand, the author no doubt had in mind that local chapters of trade associations are often the most accessible source of aid to business men, even though they publish nothing.

The outline of the kinds of information basic to appraisal of local areas (including primary sources of such information) is something beyond what this reviewer has come across anywhere else and should be most useful to students in marketing, business men and all those interested in the marketing research process. It adds to a field scantily covered in most bibliographic guides.

It is difficult to compare this book with others in the field. Coman's *Sources of Business Information* (1949) is out of date. Miss Manley's *Business Information* (1955) was based on public library experience and service and so conceived for a different purpose. This book does not, in intention, compete with the technical manuals such as *Government Statistics for Business Use*, by Hauser and Leonard (1956), *Measures of Business Changes*, by A. H. Cole (1952), or *Measuring Business Changes* by Richard Snyder (1955).

The paucity of the information given in some of the bibliographical citations is to be deplored. Often no address is given for associations and organizations. Some of the listings of services without issuing body are so fragmentary as to be useless as a guide to procurement. No prices are given. Omission of

such information is particularly unfortunate since many of the types of publications listed are not included in standard publishing lists.

On the whole, the book well fulfills its purpose as "an aid for those active in business and government, as well as for students in the field." In fact, the author seems unnecessarily modest when, after stating that "inclusion or exclusion [of information sources] was determined on the basis of the author's personal familiarity with publications and organizations and his accessibility to data," he adds that "the examples used as illustrations throughout the book do not necessarily represent the best or even the most important of their types." Why not? Mr. Wasserman is obviously well informed and well able to defend his selections, which are excellent.

The typography and format of this book are a credit to the Cornell University Press.
—Janet Bogardus, Librarian, Federal Reserve Bank of New York.

The Classified Catalog

The Classified Catalog, Basic Principles. By Jesse H. Shera and Margaret E. Egan. With a Code for the Construction and Maintenance of the Classified Catalog, by Jeanette M. Lynn. Chicago, American Library Association, 1956. 130p. \$4.

It is always a pleasure to welcome a new addition to the material on librarianship. From the first notice to the profession in 1950 of a grant from the Rockefeller Foundation for a study of a classified catalog, librarians particularly interested in this problem, or in the potentialities of such a medium of control, awaited the results with interest. The study was instituted at the John Crerar Library in Chicago by Jesse H. Shera and Margaret E. Egan, with the cooperation of Herman Henkle, librarian. We have now the finished work which Mr. Henkle in his Foreword says will leave some unsatisfied, please others, but provide, he hopes, a useful study for those librarians interested in developing this type of catalog.

It is a useful and needed study, and although some may smile a little at the pontifical statement in the Foreword about becoming a better classifier by reading Chapter

Two, this in no way diminishes the merit of the work. In their Introduction the authors refer in most modest terms to their presentation of the general principles of logic that are contained in this Chapter Two. They suggest that a grasp of the principles will be of "material assistance to the classifier, yet readers who do not wish to undertake this discipline may readily omit . . ." It is not, however, wholly a question of willingness or non-willingness to undertake this reading—it seems to the reviewer quite proper to raise the point that while a grasp of the principles is essential it does not necessarily follow that a classifier would find the ideas here presented as meaningful as might be found in another work. The ideas are sound but they are not presented simply enough to fit the purpose of this book. For example, the Aristotelian and Kantian tables are given with no explanation of terms—such as the "Modality" of Kant. If the reader is well grounded in philosophy he doesn't need the tables; if he isn't they are relatively meaningless. Perhaps the most serious drawback is the failure to make clear the applications of the philosophical categories to the expression of divisions of knowledge in a library classification.

The work is divided into three major sections. The first is a presentation of the nature and functions of a library catalog; the second the résumé of philosophical principles underlying classification; and the third a discussion of the construction and maintenance of the classified catalog. Two appendices follow, one offering a suggested method for systematic analysis of materials and the second a bibliography.

Chapter One provides a synthesis of ideas and historical facts concerning objectives of catalogs, and arguments for and against traditional forms. This, of course, has been done to some extent in all handbooks of cataloging. It serves here to set the stage for this study and draw the attention of the librarian to the cogent points necessary for making a decision between a dictionary and a classified catalog.

Reference has been made above to the intent of the second chapter. Its Section Three, "Characteristics and Structure of the Literature," presents a series of questions which will help the librarian who has a sub-

ject field so intensely developed that the need for a special classification might well be considered. In the case of a general library with an already established system of subject control, the librarian who wishes to review his policies periodically will find this section equally useful.

Chapter Three, by Jeannette M. Lynn, which gives detailed directions for making a classified catalog, is the heart of this study. The observations, as stated in the Introduction, are based upon experiences with the Dewey Decimal classification, but the principles are so presented as to be applicable for any classification. They are applicable, in major part, although some fifteen years experience with the LC system, eight of which have been concentrated wholly in its application to a classified catalog, have provided experience that would indicate some of the conclusions or recommendations in this chapter would have been enriched by a working knowledge of what another classification can do in similar circumstances. For example, a numerical index, the reverse of the alphabetic subject index, is presented as a necessary corollary to the alphabetical index. This increases the cost of the indexing appreciably and may not be as necessary as it appears. In using a classification such as the LC where specificity of numbers without recourse to tables occurs more frequently than in the DC, it is possible to pin-point the "crowded" spots and rely on a partial numerical index depending on the judgment of the classifiers to recognize the crowded number and to provide a control for it. It is also true that it is possible to take a calculated risk and omit a numerical index in an institution where withdrawal of a complete subject field or even a relatively precise part of that field will probably not occur. The author implies that "See Also" references will be widely used. Some classifiers seriously question the value of any widespread use of "See Also" references, whether in a dictionary or in a classified catalog.

It is further suggested that regular routines be established for continuous revision and refinement of the classification system. Again, with the use of LC this is not usually required of the local classifier. The LC quarterly revisions *Classification—Additions and Changes*, provide a continuous source of new

numbers and expansions of subject fields. In recent months, for example, a librarian working with large masses of materials on the Near East or Africa has found the LC offering revisions and new numbers in quantity.

These examples are not cited to suggest that use of LC is best suited to the classified catalog, but they will, it is hoped, provide in some measure comparisons that may help in a consideration of the workability of one or the other of our major classification systems. As a practical consideration it is unlikely that any large library would be able or want to pioneer a new system for its entire collection, but it might wish to provide a complementary medium of subject analysis for some areas, and in this case a comparison of the potentialities of LC and DC would be useful.

Finally, a word on the format and typography of this study. The cover has a simple and attractive design but the use of reproduction of typed copy with unjustified outer margins is regrettable. We are sacrificing a great deal to cost when as librarians we permit our works to be printed in an unattractive style. That it seems to be a financial necessity we may recognize, but if other readers are as annoyed as the reviewer with the bleakness of the appearance and the awkward way that every initial use of the letter I was followed by an off-line letter, it might be possible to get ALA to search for better methods of printing. In order, however, to avoid closing this review on a minor note, it seems only fair to repeat, this study has been needed, and the profession should be grateful to the Rockefeller Foundation for its interest and concern in promoting the examination and study of one medium of subject control that has been in partial eclipse for some time.—Mary Darrah Herrick, *Chenery Library, Boston University.*

Bibliography of Slavic Periodicals

Bibliografija rasprava, članaka i književnih radova. I Nauka o književnosti. I/1 Književnost otvoreno. Teorija književnosti. Uvodna književnost. I/2 Historija jugoslavenskih književnosti. A-K-Zagreb, Jugoslav-

ia: Leksikografski zavod FNRJ. 1956. xiii, 859p.

The Yugoslav Lexicographic Institute in Zagreb has published the first volume of that series of the monumental Yugoslav Encyclopaedia which will contain the bibliography of factual, polemical, critical, and literary articles. This first volume covers the bibliography of literature and is divided into two parts: (1) literature in general, theory of literature, and comparative literature (94 pages); and (2) the history of the South Slavic literatures, A-K (pages 95-677). There is also a subject index on pages 679-806, an index of pseudonyms and initials on pages 807-831, and an author index on pages 832-859. All pages are double-columned.

The purpose of this work is to provide a retrospective bibliography of works published in the periodicals in South Slavic languages from the end of the eighteenth century up to 1945, although the present volume ends with 1941. This was an enormous task, since the material is scattered in thousands of different periodicals published over some 150 years. Prior to publication it was necessary to classify each of the entries under an appropriate subject.

When complete, this bibliography will consist of about twenty-five volumes, of which the first fifteen will include: I-III, literature; IV-VII, Yugoslav literatures; VIII-XI, history; XII-XIII, philology and foreign literatures; XIV and XV, art and the theater. Only articles from periodicals (including scholarly and popular magazines, newspapers, annuals, almanacs, calendars, etc.) are included. Books were omitted, since another bibliography of Yugoslav books is in preparation and is scheduled for publication at an early date.

Most of the material included in this bibliography was published within the boundaries of modern Yugoslavia. However, some publications from foreign countries were also included, especially if written by Yugoslavs residing abroad or by foreigners especially interested in studies of Yugoslav history, culture or national characteristics.

Work on this bibliography was hampered by the difficulty of securing information on the date of publication of several periodicals. In the case of some periodicals it is possible

that we may discover additional volumes at a later date. Thus, supplements to this bibliography will be inevitable. A supplement containing entries for the war years, 1941-45, will also be published.

The arrangement of entries is by broad subjects, and within each subject alphabetically by author. Each entry is numbered. On the whole it can be said that this work has been executed in conformity with sound bibliographical principles, and when complete, it will be of great value for Yugoslav scholars as well as for others who are familiar with the Serbo-Croatian language and are interested in the literatures and cultures of the Yugoslav people.—Milimir Drazic, University of Kentucky Library.

Printing and Publishing in Alsace

Histoire de l'imprimerie alsacienne aux XVe et XVIe siècles. Par François Ritter, Strasbourg-Paris: F.X. Le Roux, 1955. xvi, 631p. (Publications de l'Institut des Hautes Études Alsaciennes, Vol. 14.)

It takes some daring to attempt a comprehensive study of the complex history of printing and publishing in Alsace during the fifteenth and sixteenth centuries. Problems involved touch on so many facets of cultural and social history that it becomes difficult to master the variety of topics and to evaluate the considerable literature; it is difficult also to add substantial and new information to competent studies like Charles Schmidt's *Histoire littéraire de l'Alsace* (1879), Karl Schorbach's *Der Strassburger Frühdrucker Johann Mentelin* (1932), or Paul Kristeller's *Die Strassburger Buchillustration im XV. und im Anfang des XVI. Jahrhunderts* (1888).

Yet the task is highly worth while. Alsace in general, and Strasbourg in particular, are key areas in the study of fifteenth and sixteenth century history. Publishing there provides dramatic illustrations for the slow disappearance of the medieval world, the growth of humanism and its new learning, the religious controversies before and during the Reformation, the interest in Germany's medi-

eval vernacular literature possibly to be interpreted as the by-product of rising nationalism, the increased production of contemporary literature, including some rather bawdy writings for popular entertainment, the accomplishments of city-sponsored secular education, the development of modern science paralleled by the publication of handbooks for craftsmen, and the use of book illustrations to make the products of the press more attractive and more saleable, and also better understood.

François Ritter, well known to the historian of early printing through the compilation of the *Répertoire des livres alsaciens du XVIe siècle de la Bibliothèque nationale de Strasbourg* (1932—), the *Catalogue des incunables alsaciens de la Bibliothèque nationale de Strasbourg* (1938), and the *Catalogue des incunables et des livres du XVIe siècle de la Bibliothèque municipale de Strasbourg* (1948), and known to literary historians as the co-author with Paul Heitz of the small but extremely useful *Versuch einer Zusammenstellung der deutschen Volksbücher des 15. und 16. Jahrhunderts* (1924) is well qualified to follow in the steps of the venerable Charles Schmidt and to write a comprehensive history of Alsatian printing and publishing.

His history of Alsatian printing is divided into two main parts. Part I covers the fifteenth century. In its first chapter the author surveys the literature on the Gutenberg question with its complicated and at times highly speculative controversies over the chronology of events preceding the publication of the 42-line Bible (including the most recent discussion over the *Missale speciale*). When he discusses the part which Strasbourg may have played in Gutenberg's early attempts, the author naturally shows his patriotic feelings and justifiable bias, without accepting, however, suspect evidence, like the early sixteenth century claim that the Strasbourg printer Mentelin was the real inventor of the *arz nova*. Chapters two to six deal with the earliest Strasbourg printers, Mentelin, Eggestein, Rusch, and others. Chapter seven, the last of Part I, is devoted to Alsatians who sought their fortunes away from home, among them Sixtus Riesinger (Naples), Michael Friburger (Paris, where he established the first press in France together with Gering and Crantz),

Reinhart (Lyons) and Wenssler (in nearby Basel).

Throughout Part I the author presents, and then carefully sifts, available information; he pays much attention to the connection between printers in Strasbourg, their colleagues abroad and their learned friends; he supplies data on bookmaking techniques and illustrations, which then added much to the success and fame of Strasbourg publishing. These and similar points are even more important in Part II, which is devoted to the sixteenth century. Famous men like Sebastian Brant, Geiler von Kaisersberg, Thomas Murner, Martin Luther, Philip Melancthon, Desiderius Erasmus, and Otto Brunfels appear again and again on these pages.

The first six chapters of Part II systematically discuss the character and activities of Strasbourg sixteenth century enterprises. The author supplies biographical data, often adding to, and correcting, earlier studies; he apparently made excellent use of archival sources to which we find numerous references. Important titles, where formerly ascribed to the wrong presses, are reassigned; the relations between printers and correctors, editors, authors, government and church authorities, and artists are fully treated, and every statement is well documented and copiously annotated. Indeed, the so-called "appendices" (491 in number and covering pages 485 to 595) are full of information and often prove instructive, even though they seem at times unnecessary or superabundant.

The seventh chapter of the second part is devoted in its entirety to French printing in Strasbourg (in the preceding chapters François Ritter had spoken of the interesting Reformation tracts in English, produced away from England in a town which, in spite of rigid trade regulations, had until the middle of the sixteenth century shown a liberal attitude towards all sides of the religious struggles). The eighth and ninth chapters cover the less prolific printing establishments in Haguenau, Colmar, Sélestat, Mulhouse and Laufelingen. The final chapter is devoted to six outstanding book illustrators: Wechtelin, Urs Graf, Weiditz, Baldung Grien, Schüpflein and Tobias Stimmer. In conclusion there is a summary "sur l'histoire de l'imprimerie en Alsace . . . et ses réactions dans les divers domaines de la vie sociale," final evidence

of the author's concern with printing not as a separate phenomenon but as part of the entire social and intellectual history.

Though filled with facts, and some figures, this book makes (in most parts) for enjoyable reading. Ritter avoids monotonous enumerations and generally prefers an easily flowing narrative style. Some arguments may seem overly spirited; this only added to this reader's pleasure. Without making an effort, we noticed a few misprints, but this would seem well-nigh unavoidable in this type of study.

In summary, the *Histoire de l'imprimerie alsacienne* is an excellent book which will prove to be very useful to students of the intellectual history of our early modern times. We regret that its value as a reference book is somewhat diminished by the absence of a subject or topical index; however, it does contain a careful index of authors and publisher-printers.—Rudolf Hirsch, University of Pennsylvania Library.

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